EXHIBIT T

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

Case: 14-cv-9962

IN RE: PETROBRAS SECURITIES LITIGATION

Expert Report of Michael Ussery

Submitted May 27, 2016

This Report is designated confidential pursuant to the Protective Order entered on September 2, 2015, in the above-captioned matter

Table of Contents

I.	Assignment		
II.	Qualifications		2
III.	Documents and Information Considered		3
IV.	Allegations		4
V.	Summary of Opinions		5
VI.	Background		6
	A.	Overview of Petrobras	6
	B.	Relevant Third Parties	9
	C.	Operation Lava Jato	13
	D.	2014 Material Weaknesses	15
VII.	The Nature and Limitations of ICFR		16
	A.	Overview of ICFR	16
	B.	An Effective System of ICFR Cannot Provide Absolute Assurance Against Errors or Fraud	24
	C.	The Illicit Payments Schemes Were Particularly Difficult to Prevent or Detect	25
VIII.Petrobras ICFR		ıs ICFR	27
	A.	Petrobras's ICFR System	28
	B.	Relevant Parties Outside Petrobras's ICFR system	52
	C.	Petrobras's Compliance with SOX	58
	D.	Conclusion	75
IX.	Petrobra	s's Disclosure of its Material Weaknesses	75
X.	Flaws in Dr. Henning's and Mr. Devor's Analyses of Petrobras ICFR		82
	A.	Plaintiffs' Experts Fail to Consider the Limitations of ICFR	83
	B.	Plaintiffs' Experts Inappropriately Use Hindsight	84
	C.	Plaintiffs' Experts Fail to Distinguish Between ICFR and Operational or Compliance Controls	85
	D.	A Proper Assessment of "Red Flags" Requires Consideration of Several Factors	86
XI.	Conclusion		114

I. Assignment

- 1. I have been retained by Cleary Gottlieb Steen & Hamilton LLP, counsel for Petroléo Brasilerio S.A. PETROBRAS ("Petrobras"), to develop expert opinions on certain internal control issues based on my experience as a Chief Financial Officer, a controller of public and private corporations, my experience working with public companies in accounting and internal control matters, my experience as an auditor of public companies, and my professional knowledge and experience in accounting, SEC compliance, financial reporting, and internal controls.
- 2. Specifically, I have been asked, based upon my professional knowledge and experience to (A) assess whether Petrobras performed a reasonable standard of care in planning, staffing, executing and reporting on the effectiveness of its internal control over financial reporting ("ICFR") for each of the years ended December 31, 2010, 2011, 2012, 2013 and 2014 ("Relevant Period"); (B) evaluate certain issues related to its ICFR raised by Dr. Steven Henning in his report dated May 6, 2016 ("Henning Report"); and (C) assess alleged "red flags" raised by Mr. Harris Devor in his report dated May 6, 2016 ("Devor Report"), to the extent that those issues are relevant to the evaluation of the effectiveness of Petrobras's ICFR. I refer to Dr. Henning and Mr. Devor collectively throughout my report as "Plaintiffs' Experts."
- 3. I am being compensated for my work in this matter at my standard hourly billing rate of \$550, plus out of pocket expenses. I have been assisted in this matter by Cornerstone Research staff, who have worked under my direction. My compensation is not in any way contingent or based on the content of my opinions or on the outcome of this matter.

II. Qualifications

4. I am the Principal and owner of Pt Platinum Consulting, LLC, a firm that provides accounting advisory and outsourcing services to accounting firms, SEC registrants, and privately-held companies. I assist clients in understanding complex accounting rules and how transactions should be treated for US Generally Accepted Accounting Principles ("GAAP") and SEC reporting purposes and provide assistance with remediation of material weaknesses in

ICFR. I have participated in management's evaluation of ICFR and I frequently consult with audit firms on issues raised in their assessment of ICFR. In addition, I assist clients in the preparation and review of SEC filings, including 10-Ks, 10-Qs, 8-Ks, and registration statements. As an advisor to my clients, I, at times, provide a bridge between the client and its auditor by assisting the client in the preparation of its filings and by helping to ensure that those filings are complete and in accordance with US GAAP and the rules and regulations of the SEC.

5. I have over 30 years of experience in accounting, SEC compliance, financial reporting and internal controls (including a decade of experience as an auditor with Price Waterhouse, now PricewaterhouseCoopers). I have held the positions of Controller at Triton Energy, a New York Stock Exchange ("NYSE") listed SEC registrant, the Chief Financial Officer ("CFO") of NetLojix, a telecommunications company. I have also served as acting Chief Accounting Officer ("CAO") of a NYSE listed SEC registrant. My experience has, in part, consisted of working closely on a day-to-day basis both as a controller and CFO and with controllers and CFOs who work for my clients. I have consulted with numerous clients on such topics as SEC compliance and reporting, guidance on the application of US GAAP, and compliance and reporting on ICFR as required by the SEC under the Sarbanes Oxley Act of 2002 ("SOX"). I also consult with small Certified Public Accountant ("CPA") firms on US GAAP and compliance with the Public Company Accounting Oversight Board ("PCAOB") standards and responses to PCAOB inspections. I am a CPA registered in the state of Texas. In addition, I am a lecturer for the Center for Professional Education, a Pennsylvania-based firm that offers continuing professional education courses to accountants throughout the country. A copy of my curriculum vitae is attached as Appendix A. A list of matters in which I have provided testimony over the past four years is included as Appendix B.

III. Documents and Information Considered

6. My report is based on my review of the underlying evidence in this case. My opinions are informed by the documents produced in this matter, deposition testimony, information

¹ A significant portion of the documents related to ICFR that have been produced in this matter are in Portuguese. For these documents, I have relied on English-language translations provided to me by counsel.

obtained from Petrobras, and the knowledge and experience gained during my professional career.

7. The documents I have considered are listed in Appendix C, and throughout this report I refer to certain specific documents in footnotes. As used in this report, references to specific documents and deposition testimony are given to provide factual support for the proposition referenced. In those instances where a given proposition has numerous items of factual support, examples, but not necessarily an exhaustive list, of the available factual support are given in this report. Because the opinions stated in my report are based on the material and evidence that have been reviewed to date, I may supplement or modify my opinions based on any additional factual information that is presented to me.

IV. Allegations

8. In the Consolidated Fourth Amended Class Action Complaint (the "Complaint"), Plaintiffs allege that, throughout the Class Period, Petrobras falsely stated that its internal control over financial reporting was effective.² In support of these allegations, Dr. Henning opines that "Petrobras's Executive Board and its Board of Directors should have known that the Company's senior management had failed to ensure the effective operation of internal controls [sic] over financial reporting" and that "[t]hese failures led to material weaknesses in internal controls." Mr. Devor suggests that there were "many red flags" that should have caused Petrobras to "alter its accounting" and/or conclude that it had a deficiency in its ICFR.⁴

² Complaint ¶¶ 166, 167, "Throughout the Class Period, Petrobras issued public statements, including financial statements that the Company filed with the SEC, which set forth, among other things: ... the assessment that the Company did not suffer from a material weakness in its disclosure controls and procedures or its internal controls over financial reporting. These statements were false, in that: ... (c) the Company suffered from material weaknesses in: (1) its disclosure controls and procedures, and (2) its internal controls over financial reporting." *See also, for example*: ¶¶ 251, 268, 306, 326.

³ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016. p. iii.

⁴ Expert Report of Harris L. Devor, CPA, May 6, 2016. ¶397, "PwC Brazil should have identified this impropriety and, in view of the many red flags of which it was aware in connection with its audit(s), especially as such related to the costs associated with constructing RNEST and Comperj, and the comments of Mr. da Cunha, among other things, should have caused the Company to alter its accounting, qualify its opinion as a result of this matter, and/or conclude that a deficiency existed in the Company's system of internal controls over financial reporting in this area."

V. Summary of Opinions

- 9. Based on my professional experience, my analysis of Dr. Henning's and Mr. Devor's assertions pertaining to ICFR, and my review of the materials listed in Appendix C, my opinions in this matter are summarized as follows:
 - Petrobras's process of planning, staffing, executing and reporting the effectiveness of its ICFR during the Relevant Period was appropriate and provided Petrobras's Executive Board and its Board of Directors ("Petrobras Leadership")⁵ a reasonable basis for identifying and assessing any deficiencies in ICFR.
 - Further, Petrobras's response in 2014 to allegations of corruption related to the Illicit Payment Schemes⁶ was reasonable.
 - When Petrobras issued its 2014 20-F, it was not required to reassess the effectiveness of ICFR in prior years because it did not reissue its prior period financial statements.
 - I saw no evidence that, at the time Petrobras issued its Form 20-F for each of the years ended December 31, 2010, 2011, 2012 and 2013, Petrobras Leadership knew of material weaknesses in its internal controls that it failed to disclose.
 - Plaintiffs' Experts' analyses and conclusions concerning Petrobras's ICFR are flawed, because:
 - Plaintiffs' Experts fail to consider the limitations of ICFR, particularly in the case of collusive frauds. An internal control system is designed

⁵ I do not include here those former senior managers who colluded with certain third parties to "eliminate, infringe upon, override, or circumvent" Petrobras's internal controls during the period between 2004 and April 2012 (the "Corrupt Executives"). *See* Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 175.

⁶ As discussed in Section VI., during 2014, Petrobras became aware that between 2004 and 2012, "in some of [Petrobras'] contracting processes, one or more senior managers, together with third parties (namely, some of the contractors and suppliers involved in the construction projects), colluded to eliminate, infringe upon, override or circumvent [Petrobras's] controls, which resulted in the commission of wrongful acts contrary to [Petrobras's] interests and policies." These wrongful acts are collectively referred to herein as the "Illicit Payment Schemes." *See* Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 175.

- to provide reasonable, not absolute, assurance against error or fraud.⁷ The types of fraud/corruption schemes at issue in this matter are particularly difficult to detect, even with an effective ICFR system.
- Plaintiffs' Experts inappropriately use hindsight to assess the actions of Petrobras Leadership during the Class Period.
- Plaintiffs' Experts frequently discuss internal control in broad terms and fail to differentiate between ICFR and internal controls related to operational and compliance matters. Alleged "red flags" that do not pertain to the reliability of Petrobras's financial reporting⁸ are irrelevant to a company's ICFR assessment.
- O Plaintiffs' Experts have failed to perform a proper evaluation of whether alleged "red flags" could have or should have indicated, to Petrobras Leadership, a material weakness in ICFR. Specifically, in their analyses of alleged "red flags," (1) Plaintiffs' Experts have not considered relevant factual information, (2) they have failed to assess "red flags" in the context of Petrobras's ICFR system, and (3) to the extent that ICFR deficiencies should have been identified, they have failed to assess the severity of the deficiencies based on information that was available to Petrobras Leadership at the time.

VI. Background

A. Overview of Petrobras

10. Petrobras was incorporated in Brazil in 1953 to produce and refine crude oil and natural gas on behalf of the Brazilian government. Petrobras was the country's sole supplier of crude

⁷ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 13, "Internal control can be expected to provide only *reasonable assurance*, not absolute assurance, to an entity's management and board."

⁸ As discussed in Section VII.A. controls related to a company's compliance with laws that directly relate to the company's financial reporting are included in ICFR.

⁹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 33, "Petróleo Brasileiro S.A. – Petrobras was incorporated in 1953 to conduct the Brazilian federal government's hydrocarbon activities. We began operations in 1954 and since then have been carrying out crude oil and natural gas production and refining activities in Brazil on behalf of the government."

oil and oil products until industry reform occurred in 1995 and subsequent laws were passed in 1997.¹⁰ The 1997 laws allowed the government to contract with other oil companies, which created a competitive environment within Brazil's oil and gas industry.¹¹

- 11. As of 2014, for example, Petrobras was Brazil's largest oil producer, accounting for over 90% of the country's oil production. ¹² During the Class Period, the Company was organized into six business segments: 1) Exploration and Production, 2) Refining, Transportation, and Marketing, 3) Distribution, 4) Gas and Power, 5) Biofuel, and 6) International. ¹³
- 12. The majority of Petrobras's refineries and operations are located in Brazil; however, the Company also operates in 16 other countries in Latin America, North America, Asia, and a joint venture in Nigeria.¹⁴ For the year ended December 31, 2014, Petrobras reported total sales revenue of US\$144 billion, an operating loss of US\$7 billion, capital expenditures of US\$37 billion, and total assets of US\$299 billion.¹⁵ The Company had over 80,000 employees across

¹⁰ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 33, "As part of a comprehensive reform of the oil and gas regulatory system, the Brazilian Congress amended the Brazilian Constitution in 1995 to authorize the Brazilian federal government to contract with any state or privately-owned company to carry out upstream, oil refining, cross-border commercialization and transportation activities in Brazil of oil, natural gas and their respective products. On August 6, 1997, the Brazilian federal government enacted Law No. 9,478/1997, which established a concession-based regulatory framework, ended our exclusive right to carry out oil and gas activities, and allowed competition in all aspects of the oil and gas industry in Brazil. The law also created an independent regulatory agency, the ANP, to regulate the oil, natural gas and renewable fuel industry in Brazil and to create a competitive environment in the oil and gas sector."

¹¹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 33.

¹² Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 33, "We are an integrated oil and gas company that is one of the largest companies in Latin America in terms of revenue. As a result of our legacy as Brazil's former sole supplier of crude oil and oil products and our strong and continuous commitment to find and develop oil fields in Brazil, our operations account for the majority of Brazil's oil and gas production, and we hold a large base of proved reserves and a fully developed operational infrastructure. In 2014, our average domestic daily oil production was 2,034 mbbl/d, which represents more than 90% of Brazil's total oil production."

¹³ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 34, "Our activities are organized into six business segments: [1] Exploration and Production: crude oil, NGL and natural gas exploration, development and production in Brazil; [2] Refining, Transportation and Marketing: includes refining, logistics, transportation, trading operations, oil products and crude oil exports and imports and petrochemical investments in Brazil; [3] Distribution: distribution of oil products, ethanol, biodiesel and natural gas to wholesalers and through our Petrobras Distribuidora S.A. ("Petrobras Distribuidora") retail network in Brazil; [4] Gas and Power: transportation and trading of natural gas and LNG, produced in or imported into Brazil, as well as generation and trading of electric power, and the fertilizer business; [5] Biofuel: production of biodiesel and its co-products and ethanol-related activities such as equity investments, production and trading of ethanol, sugar and the excess electricity generated from sugarcane bagasse; and [6] International: exploration and production of oil and gas, refining, transportation and marketing, distribution and gas and power operations outside of Brazil."

¹⁴ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 34, "We operate substantially all of the refining capacity in Brazil. Most of our refineries are located in southeastern Brazil, within the country's most populated and industrialized markets and adjacent to the source of most of our crude oil in the Campos Basin...Outside of Brazil, we operate in 16 countries. In Latin America, our operations extend from exploration and production to refining, marketing, retail services, natural gas and electricity power plants. In North America, we produce oil and gas and have refining operations in the United States. In Africa, through a joint venture, we produce oil in Nigeria and have oil and gas exploration in other countries while in Asia we have refining operations in Japan."

¹⁵ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, pp. 108, F-4, F-5.

the parent company, its 26 subsidiaries, and two joint operations.¹⁶

13. Petrobras's common and preferred shares have been publically traded on the Brazilian exchange (BM&F BOVESPA) since 1968 and on the NYSE since 2000 in the form of American Depository Shares or "ADSs." They are also traded on other exchanges. Brazilian Corporate Law requires that a majority of the voting shares must be owned by the Brazilian federal government, which held 50.26% of the Petrobras voting stock in 2014. The Brazilian government's ownership interest gives it the power to appoint the majority of the Company's Board of Directors and subsequently through the board, the majority of the Company's executive officers. Additionally, as a state-controlled entity, the Company's budgets and investment plans are subject to government approval and, by law, Petrobras, like all government-controlled entities in Brazil, is regularly audited by regulatory bodies, including with respect to its internal

Preferred Shares São Paulo Stock Exchange (BM&FBOVESPA) – São Paulo (ticker symbol PETR4); Mercado de Valores Latinoamericanos en Euros (Latibex) – Madrid, Spain (ticker symbol XPBRA); Bolsa de Comercio de Buenos Aires (BCBA) Buenos Aires, Argentina (ticker symbol APBRA),

Common ADSs New York Stock Exchange (NYSE) - New York (ticker symbol PBR),

Preferred ADSs New York Stock Exchange (NYSE) - New York (ticker symbol PBRA)."

¹⁶ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, pp. 70, 127, "As of December 31, 2014, we had 26 direct subsidiaries and two direct joint operations as listed below. Twenty-four are entities incorporated under the laws of Brazil and four are incorporated abroad. We also have indirect subsidiaries (including Petrobras Argentina S.A. and PGF)."

¹⁷ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 33, "Our common and preferred shares have been traded on the BM&FBOVESPA since 1968 and on the NYSE in the form of ADSs since 2000."

¹⁸ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 134, "Our shares and ADSs are listed or quoted on the following markets: Common Shares São Paulo Stock Exchange (BM&FBOVESPA) – São Paulo (ticker symbol PETR3); Mercado de Valores Latinoamericanos en Euros (Latibex) – Madrid, Spain (ticker symbol XPBR); Bolsa de Comercio de Buenos Aires (BCBA) – Buenos Aires, Argentina (ticker symbol APBR),

¹⁹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 130, "Under the Brazilian Corporate Law, as amended, the number of non-voting shares of our company may not exceed two-thirds of the total number of shares. The Brazilian federal government is required by law to own at least a majority of our voting stock and currently owns 50.26% of our common shares, which are our only voting shares."

²⁰ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 27, "Brazilian law requires that the Brazilian federal government own a majority of our voting stock, and so long as it does, the Brazilian federal government will have the power to elect a majority of the members of our board of directors and, through them, a majority of the executive officers who are responsible for our day-to-day management. As a result, we may engage in activities that give preference to the objectives of the Brazilian federal government rather than to our own economic and business objectives."; p. 142, "Our bylaws provide that, independently from the exercise of the rights above granted to minority shareholders, through cumulative voting process, the Brazilian federal government always has the right to appoint the majority of our directors."

²¹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 27, "The Brazilian federal government maintains control over our investment budget and establishes limits on our investments and long-term debt. As a state-controlled entity, we must submit our proposed annual budgets to the MPBM, the MME and the Brazilian Congress for approval. Our approved budget may reduce our proposed investments and incurrence of new debt, and we may be unable to obtain financing that does not require Brazilian federal government approval. As a result, we may not be able to make all the investments we envision, including those we have agreed to make to expand and develop our crude oil and natural gas fields, which may adversely affect our operating results and financial condition."

controls.22,23

B. Relevant Third Parties

1. Deloitte

14. In 2004, prior to the Relevant Period, Petrobras hired Deloitte Touche Tohmatsu ("Deloitte") to help implement and document a system of ICFR to achieve SOX 404 compliance.²⁴ Additionally, Deloitte provided training to Petrobras personnel on SOX 404 methodology.²⁵ Petrobras retained Deloitte in this consulting role through 2006.²⁶

2. Independent Auditors

15. Ernst & Young Auditores Independentes S/S ("EY") served as Petrobras's independent auditor from 2003-2005. As of January 1, 2006, Petrobras engaged KPMG Auditores Independentes ("KPMG") to replace EY as its independent auditor.²⁷ KPMG audited Petrobras's

²² Alexandre Figueiredo Deposition, April 18, 2016, 297:22-298:8, "Q. Now, is it your understanding that the TCU and CGU regularly audited Petrobras as part of their normal function? A. Yes. It's their function to audit Petrobras as well as all other public companies. Q. And is it your understanding that the TCU and CGU regularly requested information from Petrobras?...A. Yes. It's a common process."

²³ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 49 available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf, "Various entities oversee the procurement system. At the agency level, an internal auditor exercises the first level of control. CGU, which reports to the Ministry of Finance, provides oversight for the entire Federal executive branch. TCU serves as the external auditor, based on its Constitutional mandate and is responsible for validating the accounts of all agencies implementing Federally-funded contracts."

²⁴ Contract between Petroleo Brasileiro S.A. – Petrobras and Deloitte Touche Tohmatsu Auditores Independentes, for Specialized Technical Services, September 24, 2004, Annex I, "CONTRACTOR shall render technical advisory services related to the analysis and revision of the current internal control environment and performance of tests required to assess such controls, also comprising a specific training to the application of methodology required to Certifications considered in article 404 of US Sarbanes-Oxley Act...Service Steps.... Step 1: Diagnosis of controls and procedures adopted in compliance with Entities and Processes, listed in item 3 (Scope)....Step 2: Documentation and assessment of internal controls and control processes in compliance with Entities and Processes, listed in item 3 (Scope)....Step 3: Operating efficiency test of controls."

²⁵ Contract between Petroleo Brasileiro S.A. – Petrobras and Deloitte Touche Tohmatsu Auditores Independentes, for Specialized Technical Services, September 24, 2004, , Annex I, "CONTRACTOR shall develop, at the start of Step 1, a training program on the internal duties of human resources personnel of the units, who will be directly involved in the certification project and with the next annual certifications..."

²⁶ Amendment Nr. 01 to Contract Nr. 6000.0006146.04.2, Petroleo Brasileiro S.A. – Petrobras and Deloitte Touche Tohmatsu Auditores Independentes, October 3, 2005; Amendment Nr. 002 to Contract Nr. 6000.0006146.04.2, Petroleo Brasileiro S.A. – Petrobras and Deloitte Touche Auditores Independentes, January 2, 2006; Amendment Nr. 003 to Contract Nr. 6000.0006146.04.2, Petroleo Brasileiro S.A. – Petrobras and Deloitte Touche Auditores Independentes, March 31, 2006.

²⁷ Petróleo Brasileiro S.A. – Petrobras 2005 Form 20-F, p. 5, "We are required by Brazilian Corporation Law to change auditors every five years and to select auditors through a bidding process authorized by the Board of Directors. From June 2003 through December 31, 2005, Ernst & Young Auditores Independentes S/S served as our independent auditors and audited our financial statements for each of the years ended December 31, 2005, 2004 and 2003. PricewaterhouseCoopers Auditores Independentes audited our financial statements for each of the years ended December 31, 2002 and 2001. As of January 1, 2006, we hired KPMG Auditores Independentes to serve as our independent auditors."

2006-2011 annual financial statements. KPMG was subsequently replaced in 2012 by PricewaterhouseCoopers Auditores Independentes ("PwC"), Petrobras's independent auditor as of the date of this report.²⁸ The periodic change in audit firms was a result of the mandatory audit firm rotation requirement enacted by the Brazilian Securities Commission ("CVM"), which limits the number of consecutive terms that audit firms can provide such services.²⁹

16. Throughout the Relevant Period, Petrobras's independent auditors provided "unqualified" opinions on Petrobras's financial statements; that is, it was the independent auditors' opinions that Petrobras's financial statements were presented fairly, in all material respects. Beginning with the 2006 audit and continuing through the 2013 audit, Petrobras's independent auditors also concluded that Petrobras maintained, in all material respects effective ICFR as of December 31 of each year.³⁰

²⁸ Petróleo Brasileiro S.A. – Petrobras 2011 Amended Form 20-F, p. 3, "On January 16, 2012, Petrobras and PifCo signed a contract with PricewaterhouseCoopers Auditores Independentes – PwC, under which PwC was hired to provide specialized technical accounting audit services for the fiscal years ended 2012, 2013 and 2014. As a result of this contract, PwC replaced KPMG Auditores Independentes – KPMG, which provided specialized technical accounting audit services to Petrobras and PifCo for the fiscal years ended 2006 through 2011. KPMG is engaged as the auditor of both Petrobras and PifCo for the fiscal years ended December 31, 2011, 2010 and 2009 until the filling of this Form 20-F with the Securities and Exchange Commission. The change in auditors was made pursuant to regulations of the Comissão de Valores Mobiliários (Securities and Exchange Commission of Brazil, or CVM) that limit the consecutive terms that certain service providers may serve, and not as a result of KPMG's resignation, dismissal or declination to stand for re-election. Because of the limitations set forth in the applicable regulations, neither Petrobras nor PifCo sought to renew KPMG's contract when it expired and KPMG did not attempt to stand for re-election. The replacement of KPMG by PwC was approved by the board of directors of both Petrobras and PifCo as well as by the Audit Committee of Petrobras."

²⁹ Petróleo Brasileiro S.A. – Petrobras 2005 Form 20-F, p. 5, "We are required by Brazilian Corporation Law to change auditors every five years and to select auditors through a bidding process authorized by the Board of Directors. From June 2003 through December 31, 2005, Ernst & Young Auditores Independentes S/S served as our independent auditors and audited our financial statements for each of the years ended December 31, 2005, 2004 and 2003. PricewaterhouseCoopers Auditores Independentes audited our financial statements for each of the years ended December 31, 2002 and 2001. As of January 1, 2006, we hired KPMG Auditores Independentes to serve as our independent auditors."; Petróleo Brasileiro S.A. – Petrobras 2011 Amended Form 20-F, p. 3, "The change in auditors was made pursuant to regulations of the Comissão de Valores Mobiliários (Securities and Exchange Commission of Brazil, or CVM) that limit the consecutive terms that certain service providers may serve, and not as a result of KPMG's resignation, dismissal or declination to stand for re-election. Because of the limitations set forth in the applicable regulations, neither Petrobras nor PifCo sought to renew KPMG's contract when it expired and KPMG did not attempt to stand for re-election. The replacement of KPMG by PwC was approved by the board of directors of both Petrobras and PifCo as well as by the Audit Committee of Petrobras."

³⁰ Petróleo Brasileiro S.A. – Petrobras 2003–2013 Forms 20-F. KPMG also issued an opinion that management's assessment that Petrobras maintained effective internal control over financial reporting as of December 31, 2006 was fairly stated. Petróleo Brasileiro S.A. – Petrobras 2006 Form 20-F, p. F-2, "In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Petróleo Brasileiro S.A. – Petrobras as of December 31, 2006, and the results of its operations and its cash flows for the year then ended, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, management's assessment that Petróleo Brasileiro S.A. – Petrobras maintained effective internal control over financial reporting as of December 31, 2006, is fairly stated, in all material respects, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)." The PCAOB requirement for auditors to opine on management's assessment was dropped after 2006.

3. Regulatory Bodies

- 17. In addition to its annual independent audit by a public accounting firm, Petrobras is also subject to audits by the Tribunal de Contas da União ("Federal Auditor's Office" or "TCU") and Controladoria-Geral da União ("General Federal Inspector's Office" or "CGU").³¹ Both agencies are responsible for performing governmental audits; however, their roles differ in the type and scope of audits they perform.
- 18. The TCU is aligned with the legislative branch of the government and is responsible for performing financial statement audits over the government's executive branch.³² In this oversight role, the TCU functions as the Brazilian federal accountability office, "validating the accounts of all agencies implementing Federally-funded contracts."³³ Any individual, entity, or agency receiving federal funds or managing federal assets is subject to the supervision, evaluation, and audit by the TCU.³⁴ The agency requires that such individuals, entities, etc. must submit their accounting records to the TCU at least annually.³⁵ Additionally, these parties can be subject to special, unscheduled audits by the TCU for various reasons, including failure to comply with the annual reporting requirements or failure to demonstrate proper usage of

³¹ Petróleo Brasileiro S.A. – Petrobras 2010-2014 Annual Report of Internal Audit Activities. *See* Petróleo Brasileiro S.A. – Petrobras 2014 Annual Report of Internal Audit Activities, "The AUDIT OFFICE also participated in the work groups, Petrobras professionals training program, forums, committees, commissions and processes that required ongoing coordination with control entities, primarily the Federal Audit Office (TCU), the Federal Comptroller General's Office (CGU) and the Tax Council."

³² Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 9, "The *Tribunal de Contas da União* (Federal Auditor's Office), or TCU, is an advisory body of the Brazilian Congress, responsible for assisting it in matters related to the supervision of the Brazilian executive branch with respect to accounting, finance, budget, operational and public property (*patrimônio público*) matters."

³³ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 49, available at <a href="http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf, "Various entities oversee the procurement system. At the agency level, an internal auditor exercises the first level of control. CGU, which reports to the Ministry of Finance, provides oversight for the entire Federal executive branch. TCU serves as the external auditor, based on its Constitutional mandate and is responsible for validating the accounts of all agencies implementing Federally-funded contracts."

³⁴ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 40, available at <a href="http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf, "Brazil's Tribunal de Contas da União (TCU) is the country's supreme auditor. On behalf of the National Congress (to which it reports), it is an oversight entity that investigates and evaluates the actions and performance of people, institutions, agencies or companies (public or private) that receive Federal money or manage Federal assets with respect to the receipt, management, and use of public funds. TCU derives its authority from Articles 71 and 73 of the Constitution, which establish TCU's role, which is similar to that of the Government Accountability Office (GAO) in the US."

³⁵ "The Federal Court of Accounts of Brazil (TCU) and international cooperation," Tribunal de Contas da Uniao available at http://portal.tcu.gov.br/english/inside-tcu/structure/how-it-works htm, "Those responsible for federal public funds, assets, and valuables are required to annually submit their accounting to adjudication by the Court, as a form of rendering of accounts.

government funds.³⁶ As a result of the Brazilian government's ownership interest in and interaction with Petrobras (one of the largest of Brazil's state-owned entities), the Company is regularly subjected to the TCU's review. The agency publishes an extensive operations manual outlining the government procurement process and the TCU's role to "oversee disbursements for public contracts and hold public agencies accountable for all stages/steps of the process."³⁷ Additionally, the TCU may choose to "become involved" in matters where "serious allegations of misconduct, fraud and corruption arise"³⁸ and has established various ways for citizens, organizations or staff members to report complaints or allegations of wrong-doing, including a toll-free hotline number.³⁹ TCU audits can be initiated based on complaints received or at the discretion of its staff members.⁴⁰

19. The CGU is a complementary agency to the TCU that resides within the Brazilian government's executive branch.⁴¹ The two agencies coordinate to centralize the internal audit function over the executive branch. While the CGU does perform financial audits, it primarily

³⁶ "The Federal Court of Accounts of Brazil (TCU) and international cooperation," Tribunal de Contas de Uniao, available at http://portal.tcu.gov.br/english/inside-tcu/structure/how-it-works htm, "In addition to this annual obligation, those accountable are subject to special, unscheduled rendering of accounts in the event of failure to comply with the obligation to report, failure to demonstrate ongoing proper application of funds transferred by the Union, the occurrence of embezzlement or misappropriation of public funds, assets or valuables, or the practice of any illegal, illegitimate or ill begotten financial action that results in losses to the public treasury."

³⁷ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 41, available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf, "TCU's role in Federal government procurement, as noted in Article 113 of the procurement law, is to oversee disbursements for public contracts and hold public agencies accountable for all stages/steps of the process. As part of its mandate, TCU issues a comprehensive (and extensively used) operations' manual for public procurement, which the Agency updates periodically (it is now in its third edition released in 2006)."

³⁸ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 93, available at <a href="http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf, "Also, TCU may become involved whenever serious allegations of misconduct, fraud and corruption arise (which come to TCU's attention through various means, many of which are available to the private sector and civil society)."

³⁹ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 41, available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf, "Its oversight actions – audits, investigations, or reviews – can be triggered by its staff and complaints/leads from citizens, corporations, and/or civil society organizations that can contact TCU in various ways, including a toll-free nationwide 'hot line' and an online site. This has strengthened its reputation as an honest broker."

⁴⁰ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 41, available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf.

⁴¹ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 49, available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf "Various entities oversee the procurement system. At the agency level, an internal auditor exercises the first level of control. CGU, which reports to the Ministry of Finance, provides oversight for the entire Federal executive branch."

performs compliance audits.⁴² The responsibilities of the CGU include, for example, protecting federal public property and increasing transparency within the executive branch.⁴³ As such, the agency's main duties include bolstering internal control activities, fraud deterrence, corruption prevention, as well as monitoring the integrity of government officials.⁴⁴ In addition to its annual audit of Petrobras, the CGU can conduct special audits of Petrobras at any point throughout the year regarding specific accounts or transactions.⁴⁵ These audits can be launched in response to an allegation made through the CGU's publicly available reporting structure, a media report, or as part of the agency's regular risk management assessments.⁴⁶

C. Operation Lava Jato⁴⁷

20. In 2009, the Brazilian federal police launched an investigation, referred to as "Operation Lava Jato," aimed at exposing criminal organizations suspected of a money laundering scheme. The investigation was originally very broad and focused on crimes committed by individuals in several Brazilian states. Over the course of 2014, the Brazilian Federal Prosecutor's Office focused part of its investigation on irregularities involving Petrobras's contractors and suppliers and uncovered a broad payment scheme that involved a wide range of participants, including

⁴² "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 49, available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf "Various entities oversee the procurement system. At the agency level, an internal auditor exercises the first level of control. CGU, which reports to the Ministry of Finance, provides oversight for the entire Federal executive branch."

⁴³ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 7, "The *Controladoria Geral da União* (General Federal Inspector's Office), or CGDU, is an advisory body of the Brazilian Presidency, responsible for assisting in matters related to the protection of federal public property (*patrimônio público*) and the improvement of transparency in the Brazilian executive branch, through internal control activities, public audits, and the prevention and combat of corruption, among others."

⁴⁴ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 49, available at <a href="http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf, "CGU has many tools to exercise its control function, assess risks and provide inputs to manage risk. Besides traditional annual financial audits, it can review special accounts at any time during the fiscal year to identify, follow-up and, when necessary, reverse financial transactions that may have resulted improper use of taxpayer funds. Also, CGU can conduct special audits in response to independent allegations of wrongdoings received at one of the many public sources (website, toll-free phone number, letter) or exposed by the media. These can also be launched as part of CGU's regular risk management procedures; they are usually done in conjunction with Federal prosecutors. Further, CGU is responsible for overseeing the integrity of government officials. It also performs a more detailed civil service conduct review."

⁴⁵ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 49, available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf.

⁴⁶ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010, p. 49, available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf.

⁴⁷ Unless otherwise indicated, the source of information in this section is the Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. F-10.

former Petrobras personnel.

- 21. The payment scheme involved a group of companies ("the Cartel") that, between 2004 and April 2012, colluded to obtain contracts with Petrobras, overcharge the company under those contracts and use a portion of the overpayment received under the contracts to fund improper payments to political parties, elected officials or other public officials, individual contractor personnel, former Petrobras personnel and other individuals involved in the scheme. Petrobras referred to this scheme as the "Payment Scheme." In connection with the investigation of the Payment Scheme, Paulo Roberto Costa, a former Chief Downstream Officer, was arrested in March 2014 and subsequently charged with money-laundering and corruption. Renato de Souza Duque, a former Chief Services Officer, was also charged as a result of the investigation into the Payment Scheme. These individuals, who were in positions of authority at Petrobras, not only failed to report the existence of the Cartel, but they also used their influence to further the objectives of the Payment Scheme, primarily by helping to ensure that the Cartel members would be selected to participate in bidding rounds for goods and services contracts with Petrobras so that the Cartel members could secure contracts with the Company.⁴⁸
- 22. In addition to the Payment Scheme, the investigations identified other instances of contractors and suppliers that allegedly overcharged Petrobras and used the overpayment received from their contracts with the Company to fund improper payments to certain Petrobras employees, including Nestor Cervero, a former Chief International Officer. Those contractors and suppliers were not Cartel members and acted individually. Petrobras referred to these cases as the "Unrelated Payments Schemes."
- 23. I use the term "Illicit Payment Schemes" to collectively refer to the Payment Scheme and Unrelated Payments Schemes and the term "Corrupt Executives" to collectively refer to the Petrobras executives involved in the Illicit Payment Schemes. My opinions and analyses, throughout this report, related to Petrobras Leadership's standard of care in planning, staffing, executing and reporting on the effectiveness of its ICFR do not include the knowledge and actions of the Corrupt Executives.
- 24. As a result of information that was revealed, in part, through the Lava Jato investigation, Petrobras initiated a number of internal investigations using a mechanism called Comissao

⁴⁸ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. F-13.

Interna Apuracao (Internal Investigation Commission or "CIA"). As discussed in Section VIII.A.11., CIAs followed a standard process and were used prior to and throughout the Class Period to investigate various types of complaints at Petrobras.

D. 2014 Material Weaknesses

25. As a result of information that was revealed through the Lava Jato investigation and other governmental investigations, Petrobras wrote-off US\$2.5 billion of capitalized costs in the third quarter of 2014, representing an estimate of the amounts Petrobras overpaid for the acquisition of the property, plant and equipment ("PP&E") that were used to fund bribe payments.⁴⁹ Petrobras also concluded that its ICFR was not effective as of December 31, 2014.⁵⁰ Petrobras disclosed the existence of material weaknesses in ICFR in its 2014 Annual Report, issued on May 15, 2015.⁵¹ Notwithstanding the identified material weaknesses, management concluded that the consolidated financial statements presented fairly, in all material respects, the financial condition and results of operations at and for the periods presented, and no prior period financial statements were restated.⁵² PwC reached the same conclusions.⁵³

Petrobras believes that under IAS 16, the amounts it overpaid pursuant to this payment scheme should not have been included in historical costs of its property, plant and equipment. However, Petrobras cannot specifically identify either the individual contractual payments that include overcharges or the reporting periods in which overpayments occurred. As a result, Petrobras developed a methodology to estimate the aggregate amount that it overpaid under the payment scheme, in order to determine the amount of the write-off representing the overstatement of its assets resulting from overpayments used to fund improper payments. The circumstances and the methodology are described below."

⁴⁹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. F-9, "In the third quarter of 2014, the Company wrote off US\$2,527 of capitalized costs representing amounts that Petrobras overpaid for the acquisition of property, plant and equipment in prior years.

According to testimony from Brazilian criminal investigations that became available beginning October 2014, senior Petrobras personnel conspired with contractors, suppliers and others from 2004 through April 2012 to establish and implement an illegal cartel that systematically overcharged the Company in connection with the acquisition of property, plant and equipment. Two Petrobras executive officers (directors) and one executive manager were involved in this payment scheme, none of whom has been affiliated with the Company since April 2012; they are referred to below as the "former Petrobras personnel." The overpayments were used to fund improper payments to political parties, elected officials or other public officials, individual contractor personnel, the former Petrobras personnel and other individuals involved in the payment scheme. The Company itself did not make the improper payments, which were made by the contractors and suppliers and by intermediaries acting on behalf of the contractors and suppliers.

⁵⁰ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 175, "In some of our contracting processes, one or more senior managers, together with third parties (namely, some of the contractors and suppliers involved in the construction projects), colluded to eliminate, infringe upon, override or circumvent these controls, which resulted in the commission of wrongful acts contrary to our interests and policies. Our management has identified the following internal control deficiencies related to the failure to detect these acts that together constitute a material weakness in our control environment: (i) inadequate "tone at the top" regarding internal controls; (ii) failure to communicate the ethical values prescribed in our Code of Conduct; and (iii) lack of an effective whistleblower program."

⁵¹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 1, "As filed with the Securities and Exchange Commission on May 15, 2015."

⁵² Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p.177, "Notwithstanding the identified material weaknesses, our management has concluded that our consolidated financial statements fairly present, in all material respects, our financial

CONFIDENTIAL

VII. The Nature and Limitations of ICFR

26. In order to assess whether Petrobras's process of planning, staffing, executing and reporting the effectiveness of its ICFR was appropriate, it is important to understand the nature and limitation of ICFR. As I discuss below, due to its inherent limitations, ICFR can provide reasonable, but not absolute assurance against errors and fraud. In particular, an otherwise effective ICFR can be circumvented by the collusion of two or more people. The corruption schemes at issue in this matter involved certain Petrobras employees and, in some cases, all contractors bidding on contracts, who colluded to perpetrate a fraud on Petrobras.⁵⁴ The Petrobras employees that were involved were in a position to override or circumvent controls and avoid detection. Collusion of this kind and magnitude is difficult to detect. As such, an effective system of ICFR cannot guarantee the detection and/or prevention of such a bribery scheme. And the fact that a cartel operated undetected does not necessarily mean that Petrobras's ICFR were not effective.

A. Overview of ICFR

27. ICFR refers to the process, designed and implemented by management, to provide reasonable assurance that its financial statements materially comply with the authoritative accounting and reporting standards.⁵⁵ For decades, federal laws have required public companies

condition and results of operations at and for the periods presented, and the impact of all facts known to our management to date has been reflected in the consolidated financial statements."

⁵³ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. F-3, "In our opinion, the accompanying consolidated statements of financial position and the related consolidated statements of income, comprehensive income, changes in equity and cash flows present fairly, in all material respects, the financial position of Petróleo Brasileiro S.A. – Petrobras and its subsidiaries (the "Company") at December 31, 2014 and 2013, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2014 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board."

⁵⁴ For example, Mr. Henning concedes that "Petrobras' bidding process on its large capital improvement contracts was undermined by the involvement of certain Petrobras executives and other top management in an illegal cartel." Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-18.

⁵⁵ 17 CFR Parts 210, 228, 229, 240, 249, 270 and 274, [Release Nos. 33-8238; 34-47986], p. 9, "A process designed by, or under the supervision of, the registrant's principal executive and principal financial officers, or persons performing similar functions, and effected by the registrant's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that: (1) Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the registrant; (2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the registrant are being made only in accordance with authorizations of management and directors of the registrant; and (3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the registrant's assets that could have a material effect on the financial statements."

to maintain an effective system of internal control over financial reporting.⁵⁶ The Sarbanes-Oxley Act of 2002 directed the SEC to set forth rules related to the implementation of SOX, including a new requirement for company management to annually assess and report on the effectiveness of its ICFR.⁵⁷ For large companies like Petrobras, SOX also required that independent auditors assess the registrant's ICFR in accordance with standards established by the PCAOB,⁵⁸ a regulatory body created by SOX that provides oversight of independent auditors of publicly traded companies.⁵⁹ In addition, SOX required the establishment of a process to receive and monitor complaints related to accounting, ICFR, and auditing matters that assured the anonymity of employee whistleblowers.⁶⁰

28. In its SOX implementation rules, the SEC did not "prescribe the scope of assessment or the amount of testing and documentation required by management" when evaluating its ICFR,⁶¹ but instead required that management's annual ICFR assessment "be made in accordance with a suitable control framework's definition of effective internal control."⁶² The SEC identified the

⁵⁶ For example, the Foreign Corrupt Practices Act of 1977 set forth requirements for devising and maintaining a system of internal accounting controls sufficient to provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP or other applicable criteria. "Staff Statement on Management's Report on Internal Control Over Financial Reporting," U.S. Securities and Exchange Commission, Office of the Chief Accountant, Division of Corporation Finance, May 16, 2005, p. 3, "The establishment and maintenance of internal accounting controls has been required of public companies since the enactment of the Foreign Corrupt Practices Act of 1977 (FCPA)."

⁵⁷ "Staff Statement on Management's Report on Internal Control Over Financial Reporting," U.S. Securities and Exchange Commission, Office of the Chief Accountant, Division of Corporation Finance, May 16, 2005, p.1, "Section 404 of the Sarbanes-Oxley Act of 2002 directed the Commission to adopt rules requiring each reporting company, other than a registered investment company, to include in its annual report a statement of management's responsibility for establishing and maintaining adequate internal control over financial reporting, as well as an assessment of the effectiveness of those internal controls."

⁵⁸ 17 CFR Parts 210, 228, 229, 240, 249, 270 and 274, [Release Nos. 33-8238; 34-47986], p. 5, "Section 404 also requires every registered public accounting firm that prepares or issues an audit report on a company's annual financial statements to attest to, and report on, the assessment made by management. The attestation must be made in accordance with standards for attestation engagements issued or adopted by the Public Company Accounting Oversight Board."; p.22 "Under the Sarbanes-Oxley Act, the PCAOB has become the body that sets auditing and attestation standards generally for registered public accounting firms to use in the preparation and issuance of audit reports on the financial statements of issuers, and under Section 404(b) of the Sarbanes-Oxley Act, the PCAOB is required to set standards for the registered public accounting firms' attestations to, and reports on, management's assessment regarding its internal control over financial reporting."

⁵⁹ "About the PCAOB," Public Company Accounting Oversight Board, available at http://pcaobus.org/About/Pages/default.aspx, "The Sarbanes-Oxley Act of 2002, which created the PCAOB, required that auditors of U.S. public companies be subject to external and independent oversight for the first time in history."

⁶⁰ Sarbanes-Oxley Act of 2002, TITLE III – CORPORATE RESPONSIBILITY SEC. 301. PUBLIC COMPANY AUDIT COMMITTEES, "(4) COMPLAINTS. – Each audit committee shall establish procedures for – "(A) the receipt, retention, and treatment of complaints received by the issuer regarding accounting, internal accounting controls, or auditing matters; and "(B) the confidential, anonymous submission by employees of the issuer of concerns regarding questionable accounting or auditing matters."

⁶¹ "Staff Statement on Management's Report on Internal Control Over Financial Reporting," U.S. Securities and Exchange Commission, Office of the Chief Accountant, Division of Corporation Finance, May 16, 2005, p. 3, "In adopting its rules implementing Section 404, the Commission expressly declined to prescribe the scope of assessment or the amount of testing and documentation required by management."

^{62 17} CFR Part 241, [Release Nos. 33-8810; 34-55929], p. 11.

Internal Control – Integrated Framework (1992) created by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO")⁶³ ("1992 Framework") as an example of a suitable framework.^{64,65}

- 29. The 1992 Framework addressed internal controls beyond the ICFR addressed by SOX. Specifically, in the 1992 Framework, COSO addressed controls that are "designed to provide reasonable assurance regarding the achievement of objectives in the following categories:
 - 1) Effectiveness and efficiency of operations.
 - 2) Reliability of financial reporting.
 - 3) Compliance with applicable laws and regulations."66
- 30. SOX and SEC guidance regarding ICFR do not pertain to the "effectiveness and efficiency of operations" and only pertain to "compliance with applicable laws and regulations" to the extent that it has an impact on the company's financial reporting.⁶⁷ Plaintiffs' Experts

⁶³ COSO is a joint initiative of five private sector organizations that together provide thought leadership on various topics including internal control. "About Us," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), available at http://www.coso.org/aboutus htm, "The National Commission was sponsored jointly by five major professional associations headquartered in the United States: the American Accounting Association (AAA), the American Institute of Certified Public Accountants (AICPA), Financial Executives International (FEI), The Institute of Internal Auditors (IIA), and the National Association of Accountants (now the Institute of Management Accountants [IMA])... COSO's goal is to provide thought leadership dealing with three interrelated subjects: enterprise risk management (ERM), internal control, and fraud deterrence."

⁶⁴ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], p. 11, "In the Adopting Release, the Commission specified characteristics of a suitable control framework and identified the Internal Control – Integrated Framework (1992) created by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") as an example of a suitable framework."

⁶⁵ The 1992 Framework includes the 1994 Addendum.17 CFR Parts 210, 228, 229, 240, 249, 270 and 274, [Release Nos. 33-8238; 34-47986], pp. 10 - 11, "In 1994, COSO published an addendum to the Reporting to External Parties volume of the COSO Report. The addendum was issued in response to a concern expressed by some parties, including the U.S. General Accounting Office, that the management reports contemplated by the COSO Report did not adequately address controls relating to safeguarding of assets and therefore would not fully respond to the requirements of the FCPA. In the addendum, COSO concluded that while it believed its definition of internal control in its 1992 report remained appropriate, it recognized that the FCPA encompasses certain controls related to safeguarding of assets and that there is a reasonable expectation on the part of some readers of management's internal control reports that the reports will cover such controls. The addendum therefore sets forth the following definition of the term 'internal control over safeguarding of assets against unauthorized acquisition, use or disposition': Internal control over safeguarding of assets against unauthorized acquisition, use or disposition is a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the entity's assets that could have a material effect on the financial statements. As indicated above, to achieve the desired result and to provide consistency with COSO's 1994 addendum, we have incorporated this definition into our definition of 'internal control over financial reporting.' We are persuaded that this is appropriate given the fact that our definition will be used for purposes of public management reporting, and that the companies that will be subject to the Section 404 requirements also are subject to the FCPA requirements. So, under the final rules, safeguarding of assets as provided is specifically included in our definition of 'internal control over financial reporting."

⁶⁶ "Internal Control - Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 3.

⁶⁷ 17 CFR Parts 210, 228, 229, 240, 249, 270 and 274, [Release Nos. 33-8238; 34-47986], p. 9, "We recognize that our definition of the term 'internal control over financial reporting' reflected in the final rules encompasses the subset of internal controls addressed in the COSO Report that pertains to financial reporting objectives. Our definition does not encompass the elements of the COSO Report definition that relate to effectiveness and efficiency of a company's operations and a company's compliance

frequently discuss internal control in broad terms and fail to differentiate between ICFR, which is the focus of SOX, and internal controls related to operational and compliance matters. For example, Dr. Henning alleges deficiencies related to the number of companies involved in a rebidding process, citing non-compliance with a Presidential Decree. This alleged control deficiency relates to compliance with applicable laws and regulations, and is outside the scope of ICFR.

31. The SEC recognized that significant judgment is required to implement effective ICFR and a range of implementation methodologies could all be considered reasonable.

[T]he terms "reasonable," "reasonably" and "reasonableness" in the context of Section 404 implementation do not imply a single conclusion or methodology, but encompass the full range of potential conduct, conclusions or methodologies upon which an issuer may reasonably base its decisions. Different conduct, conclusions and methodologies by different issuers in a given situation do not by themselves mean that implementation by any of those issuers is unreasonable.⁶⁹

32. In 2013, COSO revised and reissued *Internal Control – Integrated Framework* ("2013 Framework"), which superseded the 1992 Framework, effective December 15, 2014.⁷⁰ The most significant change from the 1992 Framework to the 2013 Framework was the explicit codification of core principles that were implicit in the 1992 Framework.⁷¹ The 2013 Framework also reflected considerations of changes in the business and operating environments since the 1992 Framework, including enhanced expectations relating to the prevention and detection of fraud.⁷² Petrobras applied the 1992 Framework through December 31, 2013 and implemented

with applicable laws and regulations, with the exception of compliance with the applicable laws and regulations directly related to the preparation of financial statements, such as the Commission's financial reporting requirements. Our definition is consistent with the description of internal accounting controls in Exchange Act Section 13(b)(2)(B)."

⁶⁸ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-27.

⁶⁹ "Staff Statement on Management's Report on Internal Control Over Financial Reporting," U.S. Securities and Exchange Commission, Office of the Chief Accountant, Division of Corporation Finance, May 16, 2005, p. 5.

⁷⁰ "About Us," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), available at http://www.coso.org/aboutus htm, "Regarding internal control, in 1992, COSO published Internal Control – Integrated Framework. This framework was revised and reissued in May 2013. Effective December 15, 2014, the 1992 framework is superseded and no longer available."

⁷¹ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 2013, Appendix F, "The following significant changes are evident across all areas of the updated Framework: Applies a principles-based approach – The Framework focuses greater attention on principles. While the original framework implicitly reflected the core principles of internal control, the Framework explicitly states the seventeen principles, which represent the fundamental concepts associated with the components of internal control."

[&]quot;Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 2013, Foreword, "[T]he Framework reflects considerations of many changes in the business and operating environments over the past several decades, including: Expectations for governance oversight, Globalization of markets and operations, Changes and greater complexities in business, Demands and complexities in laws, rules, regulations, and standards,

CONFIDENTIAL

the 2013 Framework effective December 31, 2014.⁷³ I use the term "COSO Framework" to collectively refer to the 1992 Framework and 2013 Framework, as they are similar in substance.^{74,75}

- 33. Both the 1992 Framework and the 2013 Framework identify five interrelated components that a registrant must consider in assessing the effectiveness of its internal controls:⁷⁶
 - 1. Control Environment The control environment is the set of standards, processes, and structures that provide the basis for carrying out internal control across the organization. The board of directors and senior management establish the tone at the top regarding the importance of internal control and expected standards of conduct.
 - 2. Risk Assessment Risk assessment involves a dynamic and iterative process for identifying and analyzing risks to achieving the entity's objectives, forming a basis for determining how risks should be managed. Management considers possible changes in the external environment and within its own business model that may impede its ability to achieve its objectives.
 - 3. Control Activities Control activities are the actions established by policies and procedures to help ensure that management directives to mitigate risks to the

Expectations for competencies and accountabilities, Use of, and reliance on, evolving technologies, Expectations relating to preventing and detecting fraud." *See also* "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 2013, Appendix F, "The original framework considered fraud, although the discussion of anti-fraud expectations and the relationship between fraud and internal control was less prominent. The Framework contains considerably more discussion on fraud and also considers the potential of fraud as a principle of internal control."

⁷³ Petróleo Brasileiro S.A. – Petrobras 2013 Form 20-F, p. 156, "Our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2013, based on the criteria established in Internal Control – Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)...On May 14, 2013, COSO published an updated Internal Control - Integrated Framework (2013) and related illustrative documents. As of December 31, 2013, the company is utilizing the original framework published in 1992."; Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 175, "Our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2014, based on the criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)."

⁷⁴ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 2013, Foreword, "The experienced reader will find much that is familiar in the Framework, which builds on what has proven useful in the original version. It retains the core definition of internal control and the five components of internal control. The requirement to consider the five components to assess the effectiveness of a system of internal control remains fundamentally unchanged. Also, the Framework continues to emphasize the importance of management judgment in designing, implementing, and conducting internal control, and in assessing the effectiveness of a system of internal control."

⁷⁵ To the extent there are differences in the frameworks I have identified them within my report.

⁷⁶ While both the 1992 Framework and the 2013 Framework describe the five COSO components similarly, the 2013 Framework "includes enhancements and clarifications that are intended to ease use and application. One of the more significant enhancements is the formalization of fundamental concepts that were introduced in the original framework. In the Framework, these concepts are now principles, which are associated with the five components, and which provide clarity for the user in designing and implementing systems of internal control and for understanding requirements for effective internal control." "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 2013, Foreword.

achievement of objectives are carried out. Control activities are performed at all levels of the entity and at various stages within business processes, and over the technology environment.

- 4. Information and Communication Information is necessary for the entity to carry out internal control responsibilities in support of achievement of its objectives. Communication occurs both internally and externally and provides the organization with the information needed to carry out day-to-day controls. Communication enables personnel to understand internal control responsibilities and their importance to the achievement of objectives.
- 5. Monitoring Activities Ongoing evaluations, separate evaluations, or some combination of the two are used to ascertain whether each of the five components of internal control, including controls to effect the principles within each component, is present and functioning. Findings are evaluated and deficiencies are communicated in a timely manner, with serious matters reported to senior management and to the board.⁷⁷
- 34. To facilitate compliance with SOX, the SEC provided registrants with interpretive guidance addressing how registrants should document, evaluate, test and conclude on its ICFR. Management is ultimately responsible for the annual assessment of the effectiveness of ICFR. The annual assessment starts with the evaluation of the design of ICFR to determine if controls are in place to address the risk of material misstatement of the financial statements. This is a "top down" approach that reviews the risk of misstatement of component financial statement line items and footnote disclosures. Management should evaluate the design of ICFR to determine and identify key controls that are designed to mitigate the risk of material misstatement of each component. If the evaluation of the design of the ICFR identifies a component risk that has not been properly mitigated with an existing control, changes in the design are required. Once the changes in the design have been implemented, if any, and the design is determined to be appropriate, then the nature, timing and extent of testing of controls is determined based on risk assessment and the identification of key controls. Based on the evaluation of the design of ICFR and the results of testing, management is responsible for concluding on the effectiveness of ICFR. 78 Management evaluates ICFR involving particular areas of financial reporting and also

⁷⁷ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 2013, Chapter 2.

⁷⁸ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], p. 44, "Management is responsible for designing and maintaining ICFR and performing an evaluation annually that provides it with a reasonable basis for its assessment as to whether ICFR is effective as of fiscal year-end."

evaluates the entity-wide control environment.79

- 35. As defined by the PCAOB, a deficiency in ICFR exists when "the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis." A material weakness is a deficiency or a combination of deficiencies "such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis." A significant deficiency is a deficiency, or a combination of deficiencies that is less severe than a material weakness but still "important enough to merit attention by those responsible for oversight of the company's financial reporting." The primary focus of an ICFR assessment is to foster the preparation of financial statements that are materially accurate.⁸³
- 36. This contrasts to operational control objectives, which relate to the achievement of an entity's basic mission and pertain to performance and profitability goals and safeguarding resources against loss. 84 The COSO Framework provides an illustrative example that clarifies the difference between operational control deficiencies and ICFR deficiencies:

⁷⁹ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], p. 11, "The [control] framework elements describe the characteristics of an internal control system that may be relevant to individual areas of the company's ICFR, pervasive to many areas, or entity-wide. Therefore, management's evaluation process includes not only controls involving particular areas of financial reporting, but also the entity-wide and other pervasive elements of internal control defined by its selected control framework."

⁸⁰ PCAOB Auditing Standard No.5, Appendix A, A3, "A deficiency in internal control over financial reporting exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A deficiency in design exists when (a) a control necessary to meet the control objective is missing or (b) an existing control is not properly designed so that, even if the control operates as designed, the control objective would not be met. A deficiency in operation exists when a properly designed control does not operate as designed, or when the person performing the control does not possess the necessary authority or competence to perform the control effectively."

⁸¹ PCAOB Auditing Standard No.5, Appendix A, A7, "A **material weakness** is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a **reasonable possibility** that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis."

⁸² PCAOB Auditing Standard No.5, Appendix A, A11, "A **significant deficiency** is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of the company's financial reporting."

⁸³ "Staff Statement on Management's Report on Internal Control Over Financial Reporting," U.S. Securities and Exchange Commission, Office of the Chief Accountant, Division of Corporation Finance, May 16, 2005, p. 3, "An overall purpose of internal control over financial reporting is to foster the preparation of reliable financial statements. Reliable financial statements must be materially accurate. Therefore, a central purpose of the assessment of internal control over financial reporting is to identify material weaknesses that have, as indicated by their very definition, more than a remote likelihood of leading to a material misstatement in the financial statements. While identifying control deficiencies and significant deficiencies represents an important component of management's assessment, the overall focus of internal control reporting should be on those items that could result in material errors in the financial statements."

^{84 &}quot;Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 34, "Operations Objectives – These pertain to effectiveness and efficiency of the entity's operations, including performance and profitability goals and safeguarding resources against loss. They vary based on management's choices about structure and performance."

The distinction and interrelationship among the categories can further be illustrated in the context of a bank's commercial lending activity. For purposes of illustration, assume that controls exist to ensure credit files contain current customer credit histories and performance data. Further assume in this example that the bank's lending officers do not use that information in making credit decisions. Instead, approvals of draw downs against existing credit lines, and even increases in limits, are made intuitively. Financial management, however, periodically conducts thorough reviews to determine appropriate levels of loan loss reserves. Under this scenario, controls over operations have significant weaknesses, whereas controls over financial reporting do not. Practically speaking, such lax control over operations likely would result in unacceptable profit performance. The first evidence would show up in performance indicators and later in lower reported profits or even losses – signaling to top management and, if sufficiently serious, to the board, a need for investigation and action. In this way, financial reporting controls may help address the operations weakness, evidencing their interrelationship, but the weakness is in the operations controls alone.85

- 37. Public companies are not required to report deficiencies in internal controls which are not deficiencies in ICFR such as the significant weakness in controls over operations described in the above example. However, if management identifies one or more material weaknesses in ICFR that has not been remediated, management must conclude that its ICFR is not effective.⁸⁶
- 38. ICFR is effected by a number of parties, each with important responsibilities, including the board of directors (as well as sub-committees such as the audit committee), management, and internal auditors, among others, that together help achieve the entity's objectives.⁸⁷ The COSO Framework also recognizes that actions of parties outside an entity's ICFR system, such as independent auditors and regulatory bodies, can help the company achieve its ICFR objectives.⁸⁸

⁸⁵ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, pp. 37 - 38. *See also* 17 CFR Parts 210, 228, 229, 240, 249, 270 and 274 [Release Nos. 33-8238; 34-47986]. (emphasis added).

⁸⁶ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], pp. 5-6, "Exchange Act Rules 13a-15 and 15d-15 [17 CFR 240.13a-15 and 15d-15] require management to evaluate the effectiveness of ICFR as of the end of the fiscal year ... This disclosure must include discussion of any material weaknesses which exist as of the end of the most recent fiscal year and management's assessment of the effectiveness of ICFR, including a statement as to whether or not ICFR is effective. Management is not permitted to conclude that ICFR is effective if there are one or more material weaknesses in ICFR."

⁸⁷ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 83, "Internal control is effected by a number of parties, each with important responsibilities. The board of directors (directly or through its committees), management, internal auditors and other personnel all make important contributions to an effective internal control system."

⁸⁸ COSO recognizes that independent auditors are not a component of an entity's ICFR system. "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 83, "Parties external to the entity may also help the entity achieve its objectives through actions that provide information useful to the entity in effecting control, or through actions that independently contribute to the entity's objectives. However, merely because a party contributes, directly or indirectly, to achieving an entity's objectives, does not thereby make that party a part of the entity's internal control system."

B. An Effective System of ICFR Cannot Provide Absolute Assurance Against Errors or Fraud

- 39. Due to the inherent limitations of ICFR, effective ICFR provides reasonable, but not absolute assurance regarding the reliability of financial reporting.⁸⁹ For example, an otherwise effective ICFR can be circumvented by the collusion of two or more people. The COSO Framework explains that "Individuals acting collectively to perpetrate and conceal an action from detection often can alter financial data or other management information in a manner that cannot be identified by the control system." As an example, the COSO Framework notes "there may be collusion between an employee performing an important control function and a customer, supplier or another employee." ⁹¹
- 40. Another limitation of an effective ICFR system is the potential for management override; that is, overriding prescribed policies or procedures for illegitimate purposes with the intent of personal gain or an enhanced presentation of an entity's financial condition or compliance status.⁹²
- 41. As a result of these limitations, the SEC, for example, recognizes that "internal control over financial reporting cannot prevent or detect all errors, misstatements, or fraud." Similarly, the PCAOB provides "there is a risk that material misstatements will not be prevented or

⁸⁹ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 6, "An internal control system, no matter how well conceived and operated, can provide only reasonable – not absolute – assurance to management and the board regarding achievement of an entity's objectives. The likelihood of achievement is affected by limitations inherent in all internal control systems."

⁹⁰ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 81.

⁹¹ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 81.

^{92 &}quot;Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 80, "Even in effectively controlled entities – those with generally high levels of integrity and control consciousness – a manager might be able to override internal control. The term "management override" is used here to mean overruling prescribed policies or procedures for illegitimate purposes with the intent of personal gain or an enhanced presentation of an entity's financial condition or compliance status. A manager of a division or unit, or a member of top management, might override the control system for many reasons: to increase reported revenue to cover an unanticipated decrease in market share, to enhance reported earnings to meet unrealistic budgets, to boost the market value of the entity prior to a public offering or sale, to meet sales or earnings projections to bolster bonus payouts tied to performance, to appear to cover violations of debt covenant agreements, or to hide lack of compliance with legal requirements."

⁹³ "Staff Statement on Management's Report on Internal Control Over Financial Reporting," U.S. Securities and Exchange Commission, Office of the Chief Accountant, Division of Corporation Finance, May 16, 2005, pp. 4 - 5, "Further, while 'reasonable assurance' is a high level of assurance, it does not mean absolute assurance. As noted earlier, internal control over financial reporting cannot prevent or detect all errors, misstatements, or fraud. Rather, the 'reasonable assurance' referred to in the Commission's implementing rules relates back to similar language in the FCPA. Exchange Act Section 13(b)(7) defines 'reasonable assurance' and 'reasonable detail' as 'such level of detail and degree of assurance as would satisfy prudent officials in the conduct of their own affairs.' The Commission has long held that 'reasonableness' is not an 'absolute standard of exactitude for corporate records.'"

CONFIDENTIAL

detected on a timely basis" and that ICFR can "reduce, though not eliminate, this risk." Petrobras was aware of the limitations of ICFR and disclosed them in its Form 20-F:

Our management is responsible for establishing and maintaining effective internal control over financial reporting and for its assessments of the effectiveness of internal control over financial reporting.

Our internal control over financial reporting is a process designed by, or under the supervision of our Audit Committee and [our] Chief Executive Officer and Chief Financial Officer, and effected by our board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with IFRS, as issued by the IASB.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements on a timely basis. Therefore even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of the effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.⁹⁵

C. The Illicit Payments Schemes Were Particularly Difficult to Prevent or Detect

- 42. It is well known that frauds involving collusion are particularly difficult to prevent and detect. The same is true for management override of controls. In fact, collusion and management override of controls can occur in any control environment and, accordingly, these two types of frauds are recognized as being the hardest frauds to prevent.
- 43. The Illicit Payment Schemes were particularly difficult to detect, as they involved both

⁹⁴ PCAOB Auditing Standard No.5, Appendix A, A5, "Internal control over financial reporting has inherent limitations Because of such limitations, there is a risk that material misstatements will not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk."

⁹⁵ Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 151.

⁹⁶ "Management Override of Internal Controls: The Achilles' Heel of Fraud Prevention," AICPA, The Audit Committee and Oversight of Financial Reporting, 2005, p. 1, "Even though internal control over financial...may appear to be well-designed and effective, controls that are otherwise effective can be overridden by management in every entity. Many financial statement frauds have been perpetrated by intentional override by senior management of what might otherwise appear to be effective internal controls."; p. 3, "Management override is very difficult to detect."

⁹⁷ For example: Fraud Auditing and Forensic Accounting, Tommie W. Singleton, Aaron J. Singleton, G. Jack Bologna, Robert J. Lindquist, p. 64. "Two types of financial frauds deserve special attention. Management override of controls and collusion, the coordination of multiple persons toward a common objective, are frauds that are *always* possible (in *any* internal control environment) and are the *absolute hardest frauds to prevent*. Moreover, these frauds are difficult to detect, especially collusion."

collusion *and* management override of controls. Contractors and suppliers, along with Corrupt Executives within Petrobras, actively engaged in procedures designed to achieve their objective to conceal any indication that the bidding process was not functioning as Petrobras Leadership expected.⁹⁸ Thus, the involvement of multiple individuals both within and outside Petrobras made it especially difficult to detect.

The amounts overpaid under the Illicit Payment Schemes were orchestrated through the 44. standard bidding process and supported by authorized and approved contracts and amendments. The improper payments made to political parties, elected officials or other public officials, individual contractor personnel, former Petrobras personnel and other individuals involved in the scheme, were paid by contractors and suppliers out of the proceeds of the contracts Petrobras signed with contractors for investment projects and billed and recorded as part of the cost to acquire assets within PP&E.⁹⁹ To my knowledge, no improper payments have been made or have been alleged to have been made directly by Petrobras under the Illicit Payment Schemes. Rather, the payments were made from Petrobras in the amounts due and owing for investment projects, without indicating how the Cartel members would use that money, and then the Cartel members allegedly paid a portion of the sum they received in bribes to third parties. The payments of the bribes were invisible to Petrobras Leadership. Thus, the Illicit Payment Schemes were not direct attempts to subvert Petrobras's ICFR, nor did they involve conduct with the primary purpose of falsifying Petrobras's financial reports. As such, I would not necessarily expect that effective ICFR would detect bribe payments made by entities other than Petrobras, orchestrated through approved contracts, and made in amounts determined by the Company to be immaterial with respect to any prior period, 100 which specific amounts were not reflected within

⁹⁸ Odebrecht Criminal Action No. 5036528-23.2015.4.04.7000/PR, , 13th Federal Court of Curitiba, [NJ249312 Evento 1471 - SET1], Paragraph 117, "Pursuant to what is shown in the imputation, Group Odebrecht would have paid millions of dollars in undue advantages to directors of Petrobrás making use of secret accounts in the name of off-shores abroad. The transfers would have as destination off-shore accounts abroad, controlled by directors of Petrobrás."; Paragraphs 391-393, "Large contractors in Brazil, among them Construtora Norberto Odebrecht, set up a cartel, through which they systematically frustrated Petrobras bids to contract large works. In synthesis, the companies, in meetings prior to the bidding, defined, via adjustment, the company winner of the bids regarding the largest contracts. The others were responsible for covering the previously defined winner, by not presenting proposal in the bid or deliberately presenting proposal in amount higher to the one of the company defined as winner. The adjustment allowed the company defined as winner to present price proposal without real competition."

⁹⁹ I understand from the expert reports of Philip K. Verleger, Jr., Ph.D. and Sebastian Edwards that the refinery construction projects were the first such large-scale projects in decades so cost increases were not uncommon, making it easier to disguise overcharges from the Company, and I refer to their reports on the matter.

¹⁰⁰ I understand from the expert report of J. Duross O'Bryan, CPA, that the improper payments were immaterial to any prior period, both on a quantitative basis and qualitative basis.

Petrobras's books and records.

45. During the time period in which the Illicit Payment Schemes operated, three separate independent accounting firms audited Petrobras's financials and did not detect the Illicit Payment Schemes. Similarly, the TCU, which had extensive access to Petrobras documents and examined various aspects of Petrobras's construction contracts, did not identify the existence of the Illicit Payment Schemes. Nor did the CGU, which regularly audited the Company's controls. In fact, the Illicit Payment Schemes at issue in this matter were not identified as a result of information available to Petrobras. Federal Prosecutors only identified the Cartel by happenstance, after investigation of what it thought was a mere money laundering scheme, through the testimony of a cooperating witness with no formal ties to the Company. And, as discussed in Section X.D.1.b. below, the bribery payments related to SBM Offshore ("SBM"), an outside contractor, were identified by the Dutch public prosecutor, who had access to bank records not accessible to Petrobras. In the Illicit Payment Schemes of Petrobras and Illicit Payment Schemes are selected to Semantic Payment Schemes and Illicit Payment Schemes are selected to Semantic Payment Schemes and Illicit Payment Schemes and I

VIII. Petrobras ICFR

46. Plaintiffs allege that Petrobras suffered from undisclosed material weaknesses in ICFR throughout the Class Period.¹⁰⁵ For example, Dr. Henning claims that "Petrobras' Executive Board and its Board of Directors should have known that the Company's senior management had

¹⁰¹ Plaintiffs' Experts allege that the TCU raised "red flags" that should have alerted Petrobras of the existence of the cartel. See further discussion in regards to TCU reports at Section X.E.4.

¹⁰² For example: CGU Certification 2012, November 21, 2013, [PBRCG_01119417], "The examinations were done by a selection of items, according to the scope of work defined in the Annual Audit Report of Accounts permanent to this process, in accordance with the applicable federal law of the selected areas and examined activities, and including the results of the control actions carried out during the testing of the examination object, about the management of the audited unit."

¹⁰³ W. Connors, L. Magalhaes, "How Brazil's 'Nine Horsemen' Cracked a Bribery Scandal," The Wall Street Journal, April 6, 2015, "Operation Car Wash, so-named because an early break in the case occurred at a gas station owned by a suspect, came about almost by accident... Mr. Youssef agreed to cooperate in exchange for a reduced sentence for money laundering, according to prosecutors. His lawyer said he denies other charges, such as corruption. Mr. Youssef, who is in jail, declined to be interviewed."

¹⁰⁴ "Clarification about News Report," Petróleo Brasileiro S.A. – Petrobras, November 21, 2014, "On May 23, 2014, through a telephone call from the President (CEO) of SBM, Petrobras received information that the Dutch Public Prosecution Service had confirmed the transfer of funds from an account held by the commercial representative of SSM in Brazil to an employee or exemployee of Petrobras, not identified."

¹⁰⁵ Complaint ¶¶ 166, 167, "Throughout the Class Period, Petrobras issued public statements, including financial statements that the Company filed with the SEC, which set forth, among other things: ...the assessment that the Company did not suffer from a material weakness in its disclosure controls and procedures or its internal controls over financial reporting. These statements were false, in that: ... (c) the Company suffered from material weaknesses in: (1) its disclosure controls and procedures, and (2) its internal controls over financial reporting."

failed to ensure the effective operation of internal controls over financial reporting" and this "led to material weaknesses in internal controls...for the years ended December 31, 2009 through 2014." More specifically, Dr. Henning alleges deficiencies in the Control Environment, Risk Assessment, Monitoring, and Control Activities components of Petrobras's ICFR system.

47. As I discuss in the following sections, Petrobras had extensive systems and processes in place to establish, maintain, evaluate, and, when necessary, remediate deficiencies in its ICFR. It appears that Plaintiffs' Experts have not considered Petrobras's extensive ICFR system, including the significant time, resources, and effort dedicated to the design, testing, and evaluation of its ICFR, nor the various parties and processes involved in Petrobras's ICFR system.

A. Petrobras's ICFR System

48. Many parties within an organization have roles in effecting ICFR.¹¹¹ For example, management is responsible for the design and implementation of ICFR, while Internal Audit may test the effectiveness of internal controls and the Board of Directors provides oversight.¹¹² Outside parties such as the independent auditors are not part of an entity's ICFR system but often contribute to the achievement of internal control objectives and may provide information useful

¹⁰⁶ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. iii.

¹⁰⁷ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-4, "Deficiencies in Petrobras' Internal Control Environment."; 1-7, "Although the deficiencies in the control environment date back to 2004 when the cartel was initially established, it was not until 2014 that the Company disclosed the material weaknesses incapacitating its control environment:"

¹⁰⁸ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-32, "At Petrobras, management failed to adequately evaluate and assess the risks faced by the organization and to monitor whether Petrobras' internal control activities were operating effectively to ensure accurate and reliable financial reporting and compliance with laws and regulations."

¹⁰⁹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-32.

¹¹⁰ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-20, "The involvement of Petrobras executives' in the cartel ensured the breakdown in Petrobras' system of internal control activities, and was, therefore, a key to the success of the corruption scheme."

¹¹¹ For example: Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 83, "Every individual within an entity has some role in effecting internal control. Roles vary in responsibility and involvement."

^{112 &}quot;Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 83, "Everyone in an organization has some responsibility for internal control. Management, however, is responsible for an entity's internal control system. The chief executive officer is ultimately responsible and should assume "ownership" of the control system. Financial and accounting officers are central to the way management exercises control, though all management personnel play important roles and are accountable for controlling their units' activities.
Similarly, internal auditors contribute to the ongoing effectiveness of the internal control system, but they do not have primary responsibility for establishing or maintaining it. The board of directors and its audit committee provide important oversight to the internal control system."

in effecting internal control.¹¹³ In this section and Section VIII.B., I discuss the roles and responsibilities of parties internal and external to Petrobras, respectively, whose actions contributed to Petrobras's internal control objectives, including objectives related to ICFR.

1. Management

- 49. Petrobras's board of executive officers ("Executive Board"), composed of the Chief Executive Officer ("CEO") and six to seven other executive officers, was responsible for the day-to-day management of Petrobras.¹¹⁴ The other executive officers included the CFO; Chief Engineering, Technology and Procurement Officer; Chief Exploration and Production Officer; Chief Downstream Officer; Chief Gas and Power Officer; and Chief Corporate and Services Officer.¹¹⁵ Under Petrobras bylaws, "the board of directors elects the executive officers" and "may remove any executive officer from office at any time with or without cause."¹¹⁶
- 50. Petrobras's management was responsible for establishing, maintaining, and assessing Petrobras's ICFR and disclosed this responsibility in Petrobras's annual reports.¹¹⁷ Further, Petrobras's CEO and CFO signed annual SOX certifications that acknowledged their responsibilities with respect to ICFR. For example, in 2012, the CEO and CFO certifications stated:

... The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act

¹¹³ "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994, p. 83, "A number of external parties, such as external auditors, often contribute to the achievement of the entity's objectives and provide information useful in effecting internal control. However, they are not responsible for the effectiveness of, nor are they a part of, the entity's internal control system."

¹¹⁴ Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, Item 6. *For example:* Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 103, "Our board of executive officers, composed of the Chief Executive Officer (CEO) and seven executive officers, is responsible for our day-to-day management."

¹¹⁵ Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 103, "Maria das Graças Silva Foster, Chief Executive Officer and Chief International Officer, Almir Guilherme Barbassa, Chief Financial Officer and Chief Investor Relations Officer, José Antonio De Figueiredo, Chief Engineering, Technology and Procurement Officer, José Miranda Formigli Filho, Chief Exploration and Production Officer, José Carlos Cosenza, Chief Downstream Officer, José Alcides Santoro Martins, Chief Gas and Power Officer, José Eduardo de Barros Dutra, Chief Corporate and Services Officer."

¹¹⁶ Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, Item 6. Directors, Senior Management and Employees. For example: Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, p. 103, "Under our bylaws, the board of directors elects the executive officers, including the CEO, and must consider personal qualification, knowledge and specialization in electing executive officers to their respective areas....The board of directors may remove any executive officer from office at any time with or without cause."

¹¹⁷ Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, Item 15. *For example*: Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 151, "Our management is responsible for establishing and maintaining effective internal control over financial reporting and for its assessments of the effectiveness of internal control over financial reporting."

CONFIDENTIAL

Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have: (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; (b) **Designed such** internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; 5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions): (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting. 118

51. The CEO and CFO certifications were based, in part, on the sub-certifications they received from other departments within the organization. For example, other directors and executives certified that, to their knowledge, the financial statements were materially accurate and that proper disclosures had been made. The sub-certifications were completed by executives and directors within each department, including other members of the Executive Board, the Executive Manager of Internal Audit, the Ethics Commission Coordinator, the Executive Manager of Legal, and the General Ombudsman, amongst others.¹¹⁹

¹¹⁸ Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, Section 302 certifications. (emphasis added).

¹¹⁹ SOX Sub-Certifications, March/April 2013 (dates vary by signor), 2012, [PBRCG_01539894; PBRCG_01539902; PBRCG_01539912; PBRCG_01539915]. Certifications were signed by the following individuals: Executive Manager of Accounting, Technical Advisor to the Fiscal Board, Executive Manager of Internal Audit, Assistant to the Board of Directors, Assistant to the Board of Directors, Coordinator of the Petrobras Ethics Commission, Executive Manager of Corporate Strategy, Executive Manager of Legal, Executive Manager of Investor Relations, Executive Manager of Finance, General Secretary of Petrobras, General Ombudsman, Senior Executive of Energy and Gas, Executive Manager Energy and Gas, Senior Executive of Exploration and Production, Senior Executive for Downstream, Executive

52. Petrobras Leadership relied upon process level managers within their departments. Process level managers were responsible for the development and ongoing improvement of ICFR, including the design of processes and controls.¹²⁰ Process level managers understood the activities within their areas and were thus in a position to identify the relevant risks and controls.¹²¹ In addition, they interacted with other areas in the organization, such as Internal Audit, in the testing of ICFR.¹²²

2. SOX Certification Group

53. Throughout the Relevant Period, Petrobras maintained a dedicated group that managed the SOX certification process. The group responsible for managing and reporting on ICFR was part of the Corporate Finance department from 2006 through 2013, 123 after which it was migrated to a newly created Comptroller group. 124 Despite the changes in the organizational structure, Petrobras continuously maintained a group dedicated to ICFR (the Corporate Finance department and Comptroller group are collectively referred to herein as "SOX Certification Group").

Manager Downstream, Senior Executive International, Executive Manager INTER-CORP, Senior Executive for Engineering, Technology, and Materials, Executive manager of the Center for Research and Development, Corporate and Services Executive Manager, Executive Manager of HR, Executive Manager of Shared Services, Executive Manager of Health, Safety, and Environment, Executive Manager of Tax.

¹²⁰ Petrobras Prisma Training Course, Internal Controls Glossary, [PBRCG_01783864, at p. 5], "It is the person in charge of a process management, overseeing its development and ongoing improvement, interacting with all areas in the organization which influence the process activities."

¹²¹ Petrobras Prisma Training Course, Process Design Assessment, [PBRCG_01787879, at p. 4], "Qualify the managers responsible for the flows reading, analysis and approval processes prepared in the ARIS tool, by the areas responsible for internal controls, according to Petrobras TIC's standard, aiming the process design assessment performance task, which is sent in two distinct phases: 1st phase: before risk and control definition begins, which must be self-assessed and tested – its purpose is to confirm the design process, based on the understanding of the essential activities and identifying any specific and relevant point that could affect the correct planning of risks and controls scope by internal control areas and / or generate reworks; 2nd phase: after process controls self-assessment and tests conclusion – its purpose is to confirm that there were no relevant changes in process design or in self-assessed and tested risks and controls, which could significantly impair the opinion about the internal controls on 12/31 (so called "roll forward")."

¹²² Petrobras Prisma Training Course, Internal Controls Glossary, [PBRCG_01783864, at p. 5], "It is the person in charge of a process management, overseeing its development and ongoing improvement, interacting with all areas in the organization which influence the process activities."

¹²³ Petroleo Brasileiro S.A. - Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, Annex III - Presentation to the Audit Committee: Internal Controls - Process for Certification of Internal Controls, [PBRCG_01377591 at p. 29], "Since 2006 (first SOX certification), FINCORP/CI has been responsible for..."

¹²⁴ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 73rd Audit Committee Meeting, March 20, 2014, [PBRCG_00734693, at p. 3], "The General Manager for Special Audits, Finance and Services, Cesar Geraldo Fucci, referred to the Internal Audit Actions and to the development of the Audit Plan. He informed the Committee that the Board of Directors had approved, on 11/29/2013, the establishment of the Comptrollership Department, linked to Internal Auditing, with the aim of 'strengthening the enforcement of controls and conformity, including mitigating the risks of fraud and corruption within the organization'. This decision is in line with the position of this Audit Committee, namely that those activities ought to be transferred from an area of management (Corporate Finance) to an independent area exercising controls (Internal Auditing) and with a direct link to the Board of Directors."

54. The SOX Certification Group maintained responsibility for planning and monitoring of ICFR testing as well as satisfying the demands of the Audit Committee, Internal Audit, and the independent auditor.¹²⁵ Each year, it developed a SOX certification plan that addressed relevant control processes, risk assessments, and the nature, timing, and extent of Petrobras's ICFR testing.¹²⁶ The plan also identified the responsibilities of management and Internal Audit in the ICFR process, as well as the planned timing of the independent auditor's procedures.¹²⁷ For example, management tested the design of processes and controls while Internal Audit tested the operating effectiveness of controls.¹²⁸ The SOX Certification Group presented its SOX certification plan and periodic status updates to the Executive Board as well as the Audit Committee and issued a report upon completion of its annual assessment.¹²⁹

3. Board of Directors

55. Petrobras's Board of Directors provided governance, guidance and oversight to the Company and developed, evaluated, and approved Petrobras's corporate governance principles.¹³⁰ More specifically, it set the strategic goals and guidelines for Petrobras, established

¹²⁵ Petroleo Brasileiro S.A. - Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, Annex III - Presentation to the Audit Committee: Internal Controls - Process for Certification of Internal Controls, [PBRCG_01377591 at p. 29], "Since 2006 (first SOX certification), FINCORP/CI has been responsible for the planning, operationalization, remediation monitoring, and assurance of the fulfillment of all the demands of the Audit Committee and of the internal and independent auditors in the area of internal controls, aiming to achieve legal certifications without reservations."

¹²⁶ Petroleo Brasileiro S.A. - Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, Annex III - Presentation to the Audit Committee: Internal Controls - Process for Certification of Internal Controls, [PBRCG_01377591 at p. 11], "CERTIFICATION MACRO PHASES: 1. Planning and review of scope, 2. Self-assessment of process design, 3. Self-assessment of internal controls, 4. Efficacy testing of internal controls, 5. Process design change analysis, 6.Testing of internal controls of financial closing, 7. Signing of annual closing, 8. Support in remediation and change management."

¹²⁷ Petroleo Brasileiro S.A. - Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, Annex III - Presentation to the Audit Committee: Internal Controls - Process for Certification of Internal Controls, [PBRCG_01377591 at p. 11], "Responsible: FINCORP/CI, Managers with Support of FINCORP/CI, Internal Audits, PwC."

¹²⁸ For example: Petroleo Brasileiro S.A. - Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, Annex III - Presentation to the Audit Committee: Internal Controls - Process for Certification of Internal Controls, [PBRCG_01377591 at p. 11], See table of Certification Macro Phases and responsibilities.

¹²⁹ Petrobras, "Internal Controls in the Petrobras System," Code: PG-0V1-00020-0, [PBRCG_00262748, p. 4], "Corporate Internal Controls – area, unit or management group in Petrobras responsible, as far as Internal Controls are concerned, for definitions, deployment and training in structures, methodologies, standards and documentation system and monitoring and reporting of the result of self-assessments and remediation of internal controls of both the holding and subsidiaries to the Board of Directors and the Audit Committee of the affiliated companies."; pp. 11-12, "It is the responsibility of Corporate Internal Controls, according to Policy and Guidelines of Petrobras System Internal Controls and Petrobras Internal Controls Committee Bylaws:... Monitor, consolidate and report to the Executive Board and Audit Committee the results from the internal controls self assessments and remediation under the jurisdiction of managers from the holding and from the subsidiaries."

¹³⁰ Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, Item 16G. Corporate Governance. For example: Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 155, "Petrobras' board of directors develops, evaluates and approves corporate governance principles."

contract approval levels and other policies, and evaluated the organizational structure and financial performance.¹³¹ Petrobras's Board of Directors consisted of nine to ten members throughout the Relevant Period, who were elected by the shareholders on an annual basis.¹³² The Board of Directors met on a monthly basis¹³³ and had unrestricted access to all entity personnel, including the internal auditors, independent auditors, and the Ombudsman, among others.¹³⁴ 56. Consistent with other large public companies, Petrobras's Board of Directors largely carried out its duties through committees, including the Audit Committee and Remuneration and Succession Committee.¹³⁵ The Audit Committee and, to a lesser extent, the Remuneration and Succession Committee, played a part in Petrobras's ICFR.

4. Audit Committee

57. Petrobras's Audit Committee consisted of three members throughout the Relevant Period, including one member who served as the Audit Committee financial expert.¹³⁶ The Audit

¹³¹ Petrobras, "Petrobras – Petróleo Brasileiro S.A. By-Laws," pp. 10 - 11, "Section II – Board of Directors. Art. 29 – The Board of Directors is the highest-level guiding and directing body of Petrobras; it is incumbent upon it: I – to set the overall direction of the business of the Company, defining its mission, its strategic goals and guidelines; II – to approve the strategic plan as well as the pluri-annual and annual programs of expenditures and investments; III – to fiscalize the Officers' management and to establish their assignments, examining at any moment whatsoever the books and documents of the Company; IV – to evaluate performance results; V – to approve every year the amount above which acts, contracts or operations, although up to the competence of the Board of Executive Officers and their members, must be submitted to the approval of the Board of Directors; VI – to deliberate about the issuance of debentures not convertible into shares and without real estate guarantee; VII – to set up the overall policies of the Company, including those concerning the strategic, commercial, financial, risks, investment, environmental and human resources management; VIII – to approve the conveyance of the ownership of assets of the Company, including concession agreements and authorization regarding oil refining, natural gas processing, transport, import and export of oil, its derivatives and natural gas, with the possibility of limiting the value for performing such acts by the Board of Executive Officers and their members; IX – to deliberate on the choice of a member of an Electoral Regulation for the Board of Directors elected by the employees; X – to approve the plans providing for admission, career, succession, benefits and disciplinary regime of Petrobras employees."

¹³² Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, J. Item 6. Directors, Senior Management and Employees. *For example:* Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 98, "The members of the board of directors are elected at the annual general meeting of shareholders...The maximum term for a director is one year, but re-election is permitted."

¹³³ Petrobras, "Petrobras – Petroleo Brasileiro S.A. By-Laws," p. 12, "Art. 32 – The Board of Directors shall meet with the attendance of the majority of its members, upon being called by its Chairman or by the majority of its members, in a regular meeting at least every 30 (thirty) days and in a special meeting whenever necessary."

¹³⁴ Petrobras, "Petrobras – Petroleo Brasileiro S.A. By-Laws," p. 12, "Art. 31 – The Board of Directors may order inspections, audits or rendering of accounts of the Company, including the hiring of specialists, experts or external auditors, in order to inform more about the matters submitted to its deliberation."

¹³⁵ In addition to the Audit Committee and Remuneration and Succession Committee, Petrobras's Board of Directors also maintained a Health, Safety and Environmental Committee "responsible for assisting [the] board of directors in the following matters:...Establishment of global policies related to the strategic management of environmental matters within Petrobras system..." Petrobras Form 20-F, December 31, 2012, Item 6. Directors, Senior Management and Employees, p. 59.

¹³⁶ Petróleo Brasileiro S.A. – Petrobras 2010 – 2015 Form 20-F, Item 6. Directors, Senior Management and Employees. *For example*: Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 106, "All members of our Audit Committee are independent as defined in 17 CFR 240.10A-3."; p. 152 "On June 17, 2005, our board of directors approved the appointment of an Audit

Committee was explicitly tasked with assuring legal and regulatory compliance related to ICFR.¹³⁷ The Audit Committee's responsibilities, included:

- making recommendations to [the] board of directors with respect to the appointment, compensation and retention of [the] independent auditor;
- assisting [the] board of directors with analysis of [the] financial statements and the effectiveness of internal controls over financial reporting in consultation with internal and independent auditors;
- assisting in the resolution of conflicts between management and the independent auditor with respect to [the] financial statements;
- conducting an annual review of related party transactions involving interested members of [the] board of directors and executive officers and companies that employ any of these people, as well any other material transactions with related parties; and
- establishing procedures for the receipt, retention and treatment of complaints regarding accounting, internal control and auditing matters, including procedures for the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters.¹³⁸
- 58. The Audit Committee played an important role in helping Petrobras achieve its ICFR objectives. The Audit Committee met nearly every month¹³⁹ and engaged in open discussion with a number of parties (discussed in more detail below) on ICFR matters, including among other things:

Committee for purposes of the Sarbanes-Oxley Act of 2002. Mr. Sérgio Franklin Quintella is the Audit Committee financial expert and he is independent, as defined in 17 CFR 240.10A-3."

¹³⁷ Petróleo Brasileiro S.A. – Petrobras 2010 – 2015 Form 20-F, Item 16G. Corporate Governance. *For example* Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 182, "Petrobras's Audit Committee is an advisory committee to the board of directors and is composed of members that satisfy the independence requirements set forth in Rule 10A-3 under the Exchange Act. The Audit Committee has a written charter that sets forth its responsibilities that include, among other things: (i) strengthening ties with the external auditors, permitting closer supervision of their work and of issues regarding their competency and independence, (ii) assuring legal and regulatory compliance, including with regard to certification, internal controls, compliance procedures and ethics, and (iii) monitoring the financial position of the company, especially as to risks, internal auditing work and financial disclosure."

¹³⁸ Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, Item 6.

¹³⁹ The Class Period covers Audit Committee Meetings 34 through 91. Meeting 34 occurred on February 11, 2010 while meeting 91 occurred on July6, 2015. As such, 58 meetings occurred over the 66 months in the Class Period. [PBRCG_00706802; PBRCG_00914867]

- 1) Management on the status of the SOX certification process. 140
- 2) The Ethics Commission on compliance with ethical conduct.¹⁴¹
- 3) Internal Audit on its operational and ICFR audits. 142
- 4) The General Ombudsman's Office on complaints received through the whistleblower channel.¹⁴³
- 5) The independent auditor on the status of its ICFR audits.¹⁴⁴

5. Remuneration and Succession Committee

59. The Remuneration and Succession Committee advised the Board of Directors with respect to compensation and management succession¹⁴⁵ and helped achieve Petrobras's control environment objectives related to its human resources policies and practices. For example, its efforts focused on establishing policies for hiring, training, promoting, and compensating employees as well as the appointment and dismissal of the Executive Board and the Executive Manager of Internal Audit.¹⁴⁶

6. Fiscal Council

60. In accordance with Brazilian law, Petrobras maintained an independent Fiscal Council

¹⁴⁰ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 46th Audit Committee Meeting, August 24, 2011, [PBRCG_00712348 at p. 14], "3)Internal Control - Status of the SOX 2011 Certification Process and Instruction CVM Nº 480/2009 by the General Manager of Internal Control Pedro Gauziski de Araújo Figueredo."

¹⁴¹ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 53rd Audit Committee Meeting, September 3, 2012, [PBRCG_01265047 at pp. 15-19], "3) Ethics Committee – Management and Actions by the Assistant to the Board of Directors by the Assistant to the Board of Directors and Coordinator of Petrobras Ethics Committee, Flavio Lemgruber Sálvio."

¹⁴² Petroleo Brasileiro S.A. – Petrobras, Minutes of the 46th Audit Committee Meeting, August 24, 2011, [PBRCG_00712348 at p. 4], "1) Report of the Activities of the Internal Audit from the 2nd trimester of 2011 by the Executive Manager of the Internal Audit Gerson Luiz Gonçalves."

¹⁴³ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 46th Audit Committee Meeting, August 24, 2011, [PBRCG_00712348 at p. 11], "2) General Ombuds Office - Balance Sheet of the General Ombuds Office – 1st semester of 2011, by the Petrobras General Ombudsman Paulo Otto von Sperling."

¹⁴⁴ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 46th Audit Committee Meeting, August 24, 2011, [PBRCG_00712348 at p. 23], "6) Independent Auditors - KPMG - Opinion about the Financial Information of Petrobras and PIFCo from the 2nd trimester of 2011 by the Leader Partner of the Audit Bernardo Moreira."

¹⁴⁵ Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, Item 16G. Corporate Governance. *For example:* Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 155, "Petrobras has a committee that advises the board of directors with respect to compensation and management succession."

¹⁴⁶ Petrobras Internal Audit workpaper, entity level controls, 2012 - 2014, [PBRCG_01788629]. *For example see:* entity level controls 2012, "ELI06 Does the Compensation and Succession Committee (or the board that performs such function) oversee and approve: a) the appointment and dismissal of the Executive Board? b) the appointment and dismissal of Executive Manager of Internal Audit (in which case together with the Audit Committee) c) incentive plans and retention of professionals?"

that consisted of five members and met on a monthly basis¹⁴⁷ to monitor management's activities and review Petrobras periodic financial statements.¹⁴⁸ In many ways, the duties of the Fiscal Council were similar to those of the Audit Committee. For example, it made recommendations to Internal Audit¹⁴⁹ and was free to make inquiries of management and the independent auditors.¹⁵⁰ However, the Fiscal Council differed in that it served in an advisory role.¹⁵¹

7. Ethics Commission¹⁵²

61. In 2008, the Executive Board created the Petrobras Ethics Commission to guide, promote, and monitor compliance with ethical principles. The Ethics Commission consisted

¹⁴⁷ Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, [PBRCG_01070506 at p.11], "The Petrobras Audit Board, in the exercise of the powers provided for in corporate law, holds regular monthly meetings and records its discussions and requests in meeting minutes that are forwarded to the company's Management."

¹⁴⁸ Petróleo Brasileiro S.A. – Petrobras 2011 Form 20-F, p. 121, "We have a permanent Fiscal Council (Conselho Fiscal) in accordance with applicable provisions of the Brazilian Corporate Law, composed of up to five members. As required by the Brazilian Corporate Law our Fiscal Council is independent of our management and external auditors. The Fiscal Council's responsibilities include, among others: (i) monitoring management's activities and (ii) reviewing our annual report and financial statements. The members and their respective alternates are elected by the shareholders at the annual general shareholder's meeting. Holders of preferred shares without voting rights and minority common shareholders are each entitled, as a class, to elect one member and his respective alternate to the Fiscal Council. The Brazilian federal government has the right to appoint the majority of the members of the Fiscal Council and their alternates. One of these members and his respective alternate are appointed by the Minister of Finance representing the Brazilian Treasury. The members of the Fiscal Council are elected at our annual general shareholders' meeting for a one-year term and re-election is permitted." César Acosta Rech was the only member to serve on the Fiscal Council throughout the Class Period. Other members were first appointed in 2011, 2012 and 2013

¹⁴⁹ Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, [PBRCG_01070506 at p. 11], "3.3 – Decisions and recommendations of the Audit Board – CF."

¹⁵⁰ File No. S7-02-03, Brazilian Securities Commission letter to U.S. Securities and Exchange Commission, March 7, 2013, p. 3, available at https://www.sec.gov/rules/proposed/s70203/llcantidiano1.htm, "Many of the oversight functions envisaged for the audit committee are in fact exercised by the Fiscal Council of a Brazilian company. However, the decisions of the Fiscal Council are not binding on the corporation. The members of the Fiscal Council are entrusted with monitoring the management of the company and verifying their fulfillment of their statutory and fiduciary duties. The Fiscal Council, or any of its members, may make inquiries of management and of the independent auditors, to the extent required for it to fulfill its duties as an oversight body. As an oversight body, the Fiscal Council has only an advisory role and does not participate in managing a Brazilian company."

¹⁵¹ File No. S7-02-03, Brazilian Securities Commission letter to U.S. Securities and Exchange Commission, March 7, 2013, p. 3.

¹⁵² The 20-F refers to the "Ethics Commission" but the produced materials refer to "Ethics Committee." I understand that both the Ethics Commission and Ethics Committee refer to the same group within Petrobras.

¹⁵³ Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Form 20-F, Item 16B. Code of Ethics. *For example*: Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 152, "Our executive officers further developed our ethics management through the creation of the Petrobras Ethics Commission in 2008 which since then, has become responsible for promoting corporate compliance with ethical principles, as well as acting as a forum for discussion of subjects related to ethics."

Petroleo Brasileiro S.A. – Petrobras, Minutes of the 53rd Audit Committee Meeting, September, 3, 2012, Annex III – Presentation to the Audit Committee: Ethics Management at Petrobras, [PBRCG_01378706 at p. 15], "To guide, disseminate, and promote compliance with the ethical principles and conduct commitments established by the Code of Ethics, tracking their implementation, development, and monitoring at the Company;"; p. 18, "Ethics Committee Activities. Consulting for Company departments, issuing notes regarding: [1] Guidelines for Operational Risk Control for Petrobras Trading Desks, [2] Conflicts of Interest, [3] Psychological harassment, [4] Company's adherence to the Pro-Ethics Company Registry; Information about Ethics Management at Petrobras, in response to national and international Agencies (CEP, DJSI, 20F Form); Acknowledgement Statement Monitoring by the System."

of seven members¹⁵⁵ who met on a regular basis. The Ethics Commission communicated with other Petrobras groups such as the Ombudsman's Office, Internal Audit, and Human Resources on ethical matters¹⁵⁶ and presented to the Audit Committee on a periodic basis regarding its activities and ethical conduct at Petrobras.¹⁵⁷

8. Internal Audit

62. Internal Audit was a separate department within Petrobras that reported directly to the Audit Committee.¹⁵⁸ The Internal Audit department was led by Gerson Gonçalves, Executive Manager of Internal Audit, throughout the Relevant Period.¹⁵⁹ Internal Audit planned and performed audits of Petrobras's internal controls, including Petrobras's ICFR, compliance controls, and operational controls.¹⁶⁰ In addition, as discussed in more detail below, Internal Audit assisted the Office of the CEO (also referred to as "GAPRE")¹⁶¹ in the coordination of audits by regulatory bodies.^{162,163}

¹⁵⁵ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 66th Audit Committee Meeting, October 17, 2013, [PBRCG_01284372 at p. 5], "The Ethics Committee is composed of seven members, representatives of each board."

¹⁵⁶ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 66th Audit Committee Meeting, October 17, 2013, Annex I - Presentation to the Audit Committee: Ethics Management at Petrobras, [PBRCG_01386535 at p. 10], see "Relationship Network."

¹⁵⁷ For example: Petroleo Brasileiro S.A. – Petrobras, Minutes of the 53rd Audit Committee Meeting, September 3, 2012, [PBRCG_01265047 at p. 15], "3) Ethics Committee – Management and Actions by the Assistant to the Board of Directors by the Assistant to the Board of Directors and Coordinator of Petrobras Ethics Committee, Flavio Lemgruber Sálvio."

¹⁵⁸ Petrobras, "Internal Controls in the Petrobras System," Code: PG-0V1-00020-0, [PBRCG_00262748 at p. 9], "It is the responsibility of the Internal Audit, according to attributions relative to Audit Committee. Support the Audit Committee on assisting the Board of Directors in the analysis of the consolidated financial statements in relation to its conformity to legal requirements, the appropriate representation of the Company's economic and financial status and in the assessment of the internal controls effectiveness."

¹⁵⁹ Gerson Luiz Gonçalves Deposition, February 19, 2016, 10:3-10, "Q. Now I understand at a certain point in time you were the executive manager for internal audit at Petrobras, is that correct? A. I started working for Petrobras in Rio de Janeiro in December of 1976, and I started to work soon at the internal audit and I grew with them, the company, and during the last 22 years I was the executive manager for internal audit."

¹⁶⁰ For example: Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, p. 3 [PBRCG-P_02283348], "II – FOCUS OF THE WORKS. The examinations are aimed at continuous improvement of accountability processes of Petrobras, its Subsidiaries and Controlled Companies. In this context, is inserted the need for tests aimed at assessing the control environment, including compliance with the requirements of Section 404 of the Sarbanes-Oxley Act (SOX) of the USA and the consequent certification of the internal control system in 2012. The examinations targeted for this assessment are classified in this Plan in the Internal Control mode. There will also be conducted audits classified in the Accounting, Financial and Tax modalities in which will be evaluated mainly the effectiveness and economy aspects; as well as the conformity with procedures with regard to compliance with the applicable standards and legislation."

¹⁶¹ Marcos Panassol Deposition, April 19, 2016, 89:12-14, "So that's the manager within what they call GAPRE, G-A-P-R-E. That's the CEO's office."

¹⁶² Gerson Luiz Gonçalves Deposition, February 19, 2016, 130:2-11, "A. So every TCU report and every CGU report are submitted to the president. Q. Of the company? A. Of the company. The president's cabinet submits the reports to the internal auditing division. Q. So you get the report eventually? A. Within the internal audit, there is a management in charge of following up the responses of the company to the TCU and CGU inquiries."

CONFIDENTIAL

- 63. In performing its audit responsibilities, Internal Audit was provided unrestricted access to the Company's documents, including its books and records and personnel key to the work being performed.¹⁶⁴
- 64. Internal Audit's organizational structure remained fairly consistent from 2010 to 2013.

 In 2014, the responsibilities of the SOX Certification Group were transferred from Corporate Finance to a newly created Comptroller's unit within Internal Audit.

 166-167
- 65. Internal Audit annual staffing hours ranged between 257,000 341,000 hours during the Class Period. This included time spent on operational and ICFR audits as well as communication with the Executive Board, Audit Committee, and regulatory bodies. **Table 1** summarizes Internal Audit staffing hours from 2010 to 2014.

¹⁶³ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 54th Audit Committee Meeting, September 27, 2012, Annex I - Presentation to the Audit Committee: Relationship with Government Control Bodies 1/1/2012 - 6/30/2012, [PBRCG_01263002 at p. 8], "Internal Audit Activities. Oversight Federal Audit Tribunal/Brazilian General Accounting Office. Oversight Plan→Field Oversight→Oversight Report→End of Oversight Checks."

¹⁶⁴ Petrobras, "Regulation of the Internal Audit of Petrobras," Code: PG-0V1-00022-0, [PBRCG_01552265 at p.4], "b) The Executive Manager of the Internal Audit reports, administratively, to the President of Petrobras and, in the exercise of its function, will have free access to the President of the Board of Administration, to President of and Directors of Petrobras, to the President of the Fiscal Board and to the Committee of Auditoria. c) The auditors will have unrestricted access to any unit of Petrobras System to evaluate controls, registers, archives, documents, to accomplish countings of good and money of the Company and to request information about any subject affection to the works of Audit, in such a way internal as externally."

Petróleo Brasileiro S.A. – Petrobras 2010 Annual Report of Internal Audit Activities, [PBRCG_01076070]; Petróleo Brasileiro S.A. – Petrobras 2011 Annual Report of Internal Audit Activities, [PBRCG_01076218]; Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, [PBRCG_01070506]; Petróleo Brasileiro S.A. – Petrobras 2013 Annual Report of Internal Audit Activities, [PBRCG_01073080].

¹⁶⁶ Petróleo Brasileiro S.A. – Petrobras 2014 Annual Report of Internal Audit Activities, [PBRCG_00806899 at p. 43], "7.1 – Management – General Comptroller's Office. The activities of this division began in the 1st half of 2014, to address the Petrobras Corruption Prevention Program (PPPC) approved by the Executive Board. The new Internal Audit structure may be observed in the department organization chart, in Item 1 of this Annual Report. The responsibilities of the Comptroller's Office include: ensuring the functioning, adequacy and strengthening of the Petrobras System of internal controls, in accordance with the Company Strategic Plan, aimed at mitigating business risks corresponding to compliance; certifying compliance with laws and regulations; creating and disseminating the culture of compliance, in addition to contributing to guidance in and increasing awareness of prevention, detection and correction of activities and conduct that might result in damage to the reputation of Petrobras and the brand, extending to the PPPC."

¹⁶⁷ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 73rd Audit Committee Meeting, March 20, 2014, [PBRCG_00734693 at p. 3], "*The General Manager for Special Audits, Finance and Services, Cesar Geraldo Fucci*, referred to the Internal Audit Actions and to the development of the Audit Plan. He informed the Committee that the Board of Directors had approved, on 11/29/2013, the establishment of the Comptrollership Department, linked to Internal Auditing, with the aim of 'strengthening the enforcement of controls and conformity, including mitigating the risks of fraud and corruption within the organization'. This decision is in line with the position of this Audit Committee, namely that those activities ought to be transferred from an area of management (Corporate Finance) to an independent area exercising controls (Internal Auditing) and with a direct link to the Board of Directors."

CONFIDENTIAL

Table 1
Internal Audit Staffing Hours

	Hours per Year				
Distribution of Activities	2010	2011	2012	2013	2014
Actual hours for the scheduled audits, including planning, field performance,					
completion of works in the Headquarters, preparation of reports, etc	144,120	147,466	172,480	176,488	138,277
Technical provision to cope with the demands of the following agencies/entities:					
- Executive Board/Directorate					
- Board of Directors and Fiscal Council					
- Audit Committee					
- Management of Operating Units, of the Headquarters and others	50,248	71,142	64,160	53,143	33,948
Activities complementary to audits (technical support, participation on commissions					
and work groups, data extraction, etc)	-	-	-	-	44,932
Participation in the performance of GASPETRO Internal Audit Plan	-	5,496	6,556	5,472	6,021
Continuous Follow-up/Audit	6,720	12,756	12,936	14,592	16,920
Support, advisory and follow-up activities, arising out of the demands of the					
controlling agencies – CGU and TCU	18,105	18,064	19,476	17,848	19,766
Completion of works of the prior year Plan/Complementary activities to audits	8,760	16,250	30,122	32,111	1,748
Training	8,471	9,996	12,850	9,972	8,536
Vacation/Holidays and Departures/Layoffs	20,432	21,200	22,440	27,296	29,994
Total Hours Fieldwork Team	256,856	302,370	341,020	336,922	300,142

Source: Petróleo Brasileiro S A – Petrobras 2010 - 2014 Annual Report of Internal Audit Activities, Section 2 1 e, [PBRCG_01076070 (2010); PBRCG_01076218 (2011); PBRCG_01070506 (2012); PBRCG_01073080 (2013); PBRCG_0806899 (2014)]

66. The department included members with internal control-specific credentials such as Certified Internal Auditors and employees with Certifications in Control Self-Assessment awarded by the Institute of Internal Auditors as well as Certified Information System Auditors awarded by the Information Systems Audit and Control Association. In addition, Internal Audit personnel engaged in professional trainings on an annual basis, including trainings relating to procurement, business processes, and the audit process. Table 2 summarizes Internal Audit training hours from 2010 to 2014.

¹⁶⁸ For example: Petróleo Brasileiro S.A. – Petrobras 2013 Annual Report of Internal Audit Activities, p. 43, [PBRCG_01073080–263], "Certifications: [1] CIA (Certified Internal Auditor) 17 employees; and CCSA (Certification in Control Self-Assessment) 8 employees, awarded by the IIA (Institute of Internal Auditors). [2] CISA Certification: (Certified Information System Auditor) 3 employees, awarded by the ISACA (Information Systems Audit and Control Association)."

¹⁶⁹ Petróleo Brasileiro S.A. – Petrobras 2014 Annual Report of Internal Audit Activities, [PBRCG 00806899 at p. 39].

Table 2
Internal Audit Training Hours

	Hours per Year				
Employee Training	2010	2011	2012	2013	2014
Operations and External Coordination	10,456	11,504	12,850	9,972	8,536
Support	2,579	3,432	1,944	1,268	1,490
Comptroller's Office	-	-	-	-	1,716
Hours per Year	13,035	14,936	14,794	11,240	11,742
Internal Audit Staff (count)	203	205	222	223	285
Training Hours per Internal Audit Staff	64	73	67	50	41

Source: Petróleo Brasileiro S.A. – Petrobras 2010 - 2014 Annual Report of Internal Audit Activities, Section 7.2 (Section 6.2 in 2014 Report), [PBRCG_01076070 (2010); PBRCG_01076218 (2011); PBRCG_01070506 (2012); PBRCG_01073080 (2013); PBRCG_00806899 (2014)]. The "Operations and External Coordination" hours for 2012 through 2014 reconcile to the "Train line in Table 1. For 2010 & 2011, the "Training" line in Table 1 only reflects the "Operations and External Coordination" training hours that were completed during working hours; whereas, Table 2 shows the aggregate "Operations and External Coordination" training hours completed during and after working hours.

67. Internal Audit developed its annual audit plan based on a combination of risk assessment, materiality considerations, and discussions with the SOX Certification Group and the independent auditor.¹⁷⁰ The plan identified the anticipated ICFR and operational/compliance audits by both business area and process.^{171,172} An audit performed by Internal Audit constituted an "independent review" to "provide the organization with support to achieve its objectives through assessment and improvement of risk management processes, control environments and

¹⁷⁰ Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, p. 3, [PBRCG-P_02283348], "III.SELECTION CRITERIA: The scope of processes deserving examination is defined from the risk mapping and relevance necessary for the evaluation of the internal control environment, and that has the participation of this INTERNAL AUDIT, from the Corporate Finance Area and the External Auditing Company responsible for certification of the Company's control. In this sense, processes considered relevant in relation to the Company's Financial Statements were selected for examination, and those related to the most significant accounting items were contemplated, i.e., with values greater than 5% of the Company's profit before taxes noting also their respective level of exposure to risks that could jeopardize the strategic objectives of Petrobras. In addition to the materiality it was taken into account the qualitative factors of risk and linking to the Strategic Plan."

¹⁷¹ Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, p. 3, [PBRCG_01070506-662], "II. FOCUS OF THE WORKS: The examinations are aimed at continuous improvement of accountability processes of Petrobras, its Subsidiaries and Controlled Companies. In this context, is inserted the need for tests aimed at assessing the control environment, including compliance with the requirements of Section 404 of the Sarbanes-Oxley Act (SOX) of the USA and the consequent certification of the internal control system in 2012. The examinations targeted for this assessment are classified in this Plan in the Internal Control mode. There will also be conducted audits classified in the Accounting, Financial and Tax modalities in which will be evaluated mainly the effectiveness and economy aspects; as well as the conformity with procedures with regard to compliance with the applicable standards and legislation."

¹⁷² Petróleo Brasileiro S.A. – Petrobras 2010 – 2014 Annual Report of Internal Audit Activities, Section 2.1, [PBRCG_01076070 (2010); PBRCG_01076218(2011); PBRCG_01070506; (2012); PBRCG_01073080 (2013); PBRCG_00806899 (2014)].

corporate governance."¹⁷³ Audits were performed at the process level of individual entities, such as the Purchase of Materials process at a specific refinery.¹⁷⁴ Internal Audit performed an average of 335 annual operational audits and 182 annual ICFR audits across all of Petrobras from 2010 to 2014. On average, it annually performed 179 operational audits and 49 ICFR audits of the "Procurement of Goods and Services" and "Accounting" processes relevant to procurement and PP&E.¹⁷⁵

68. Through its audits, Internal Audit identified instances of non-compliance and worked to remediate the issues as necessary. For example, Internal Audit completed an audit of a contract with Odebrecht in October 2012 (the "SMS contract"). The SMS contract was originally signed in October 2010¹⁷⁷ and called for Odebrecht to provide environmental, health, and safety services for Petrobras in multiple countries. In its audit, Internal Audit determined that the SMS contract was entered into quickly and that, as a result, key terms such as pricing were not clearly defined. The Internal Audit report was provided to the Executive Officer and

¹⁷³ Petrobras Prisma Training Course, Internal Controls Glossary, [PBRCG_01783864 at p. 2], "An audit is an independent review and consulting activity organized to add value and improve the organization's operations. It must provide the organization with support to achieve its objectives through assessment and improvement of risk management processes, control environments and corporate governance."

¹⁷⁴ For example Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, Annex I, p. 25, project #188, [PBRCG-P 02283348].

¹⁷⁵ Averages calculated from Petrobras "Annual Report of Internal Audit Activities" 2010 – 2014, Section 2.1.C.2 Segmentation of Audits Per Examined Process. [PBRCG_01076070 (2010); PBRCG_01076218(2011); PBRCG_01070506; (2012); PBRCG_01073080 (2013); PBRCG_00806899 (2014)]

¹⁷⁶ Petrobras, Final Audit Report R-9265/2011, October 15, 2012, [PBRCG_01352851 at p. 10], "15 de outubro de 2012."; Maria das Graca Foster Deposition, April 29, 2016, 154:17-155:3, "Q. Do you recall whether or not the final internal report on SMS was finalized on October 15, 2012?…Internal audit report. A. The audit report? Q. Yes. A. Yes, I do remember. Yes."

¹⁷⁷ Maria das Graca Foster Deposition, April 28, 2016, 123:23-124:2, "Q. Do you recall exactly when the executive board of Petrobras approved the SMS contract between Petrobras and Odebrecht? A. 2010. I believe it was in October."

¹⁷⁸ Marcos Panassol Deposition, April 19, 2016, 158:17-159:9, "Q. Okay. Let's go to 5. 5 -- and I am looking at 5(a). 'One specific contract for maintenance services for the international assets signed in 2010 was audited by company's internal audit, and the overall value was reduced from 800 million to 400 million.' Mr. Panassol, are you familiar with that contract? A. Yes, I'm familiar. Q. Can you tell me what that contract was? A. The contract was between the company and Odebrecht or one of the entities in the Odebrecht group to provide some maintenance, health, safety and environmental services to the company's -- or some of the company's subsidiaries out of Brazil."

¹⁷⁹ Gerson Luiz Gonçalves Deposition, February 19, 2016, 120:18-121:13, "Q. Mr. Goncalves, the nonconformities you just referenced, you said you pointed out a series of nonconformities. Did one of these nonconformities involve overpricing by Odebrecht? A. The contract was done in a very quick or fast way and wrongly. There should be, there should have been a specific contracting for each country, but actually a contract was created in Brazil that branched out to other countries. It was based on the currency, Brazilian currency, so when it went to the other countries, it was difficult to estimate the prices for each of these countries. The contract was by unit price. Each product had one price. The contract had a spreadsheet with many prices but in Brazilian reais, but services would be provided in Argentina, Paraguay, Uruguay, so they would have to convert the currency, so it depended upon each currency of each country."

¹⁸⁰ Maria das Graca Foster Deposition, April 28, 2016, 129:16-130:11, "Q. Can you tell me what the non-compliances were that were identified with respect to the SMS contract?...A. First, it was a contract worth \$850 million, but that would only pay for what would in fact be done, and I do not like to work with contracts, open contracts, of this nature. Secondly, because there were double prices, duplicated prices or triplicated prices, to perform one service on one site only, there were revisions or

General Manager of the International Division,¹⁸¹ who worked to re-negotiate the SMS contract with Odebrecht and recommended the findings be presented to the Executive Board and the Audit Committee.¹⁸² As a result, the contract value was reduced from US\$ 826 million to US\$ 482 million.¹⁸³ While Mr. Devor specifically identifies this Internal Audit report as an alleged "red flag,"¹⁸⁴ the report in fact provided evidence of Petrobras's internal control system operating as intended.¹⁸⁵

69. In addition to the audits contemplated in the Annual Audit Plans, Internal Audit performed additional audits based upon findings of its planned audits, new information obtained after approval of the plan, and requests from management, the Audit Committee, the General

reevaluations of the integrity of the structures. For example, an oil tank. That is just an example. The service, let's say specified a floating cap tank. A tank with a floating cap. And on a site where the tank that was there was a fixed cap tank. So there were many, many irregularities, imperfections, non-conformities or non-compliances. Imperfections. No irregularities. Imperfections."

¹⁸¹ Gerson Luiz Gonçalves Deposition, February 19, 2016, 113:14-20, "Q. Who did this report go to, if you know? A. Who did it go to? Q. Yes. A. The report was made, and it was submitted to the executive officer of the international division and the general manager of the international division."

Maria das Graca Foster Deposition, April 28, 2016, 128:2-24, "Q. And at any point were there irregularities detected in connection with the SMS contract? A. We had a report. An auditing report. An audit report. It was a volunteer auditing, because the auditing department can audit beyond what has been planned. So when I took up the CEO position, this audit was ongoing, which I didn't know. In October 2012, Gerson, the auditing executive manager, had told me that the report had been completed, and at that time he was discussing with the international division officer for Petrobras because I had been CEO of Petrobras and I had been head of the international division as well and of course earning just one salary for that. So in any event, I told Gerson to complete or to finalize the report completely and to submit it for my reading, and that is what I did. And I decided to inform the executive board about it due to the non-compliances that were found."; Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, [PBRCG_00727994 at p. 5], "Executive Manager Gerson Gonçalves reported a case of nonconformity in the process that led to a contract with Construtora Norberto Odebrecht – CNO, for the performance of services connected with the portfolio of SMES Projects in the International Businesses Department (Petrobras and foreign affiliates), for an estimated global value of US\$ 825.6 million. The contract was executed by the Executive Management of the International Corporate Department (INTER-CORP), a body of the International Board of Directors."

¹⁸³ Gerson Luiz Gonçalves Deposition, February 19, 2016, Exhibit 12 B, [PBRCG_00737917 at pp. 1 - 2], "During the presentation, the summary of the main clauses agreed on Addendum 5 was acknowledged, which is transcribed herein:... g) reduction of the total estimated value of the Contract from US\$825,660,293.76 (eight hundred, twenty five million, six hundred and sixty thousand, two hundred and ninety three dollars and seventy six cents) to US\$481,690,002.21 (four hundred and eighty one million, six hundred and ninety thousand and two dollars, and twenty one cents); h) establishment of mechanisms to compensate credits/discounts granted to Petrobras and/or its Affiliates, due to the renegotiation of the Contract;..."

¹⁸⁴ Expert Report of Harris L. Devor, CPA, May 6, 2016, ¶ 258, "Further, PwC would have been aware, during its 2013 audit, of a Petrobras Internal Audit report dated October 15, 2012. This examination identified that a contract between the Company and Odebrecht, executed on October 26, 2010, was not in conformity with: 1) the definition of the scope of services, 2) the composition of the contract costs and 3) the conduct of the bidding process. This examination additionally identified: 1) billings that were disproportionate to the services performed, 2) costs well above prevailing market prices, 3) lack of services in 8 of the 19 sites cited in the contract, and 4) non-applicable, inconsistent, and excessive costs."

¹⁸⁵ Marcos Panassol Deposition, April 19, 2016, 160:17-161:17, "Q. Did the fact that -- in connection with the 2013 audit, did the fact that Petrobras reduced the value of the contract with Odebrecht from U.S. 800 million to 400 million cause any concern to you at the time? A. When the facts were presented, they were all concluded and this was the company's internal control environment working. So internal audit, as part of their work, audited a contract, identified the need to adjust the contract. This was sent back to the area and they adjusted the contract. So that's -- to make clear, the contract was never paid so it was a value of 800. It was reduced to 400 and that was subsequently executed. The four people that were involved in that as identified in internal audit had been sanctioned in different ways so everything had already been resolved and so we didn't have any further concern on that. Q. Did you testify that Odebrecht was the contractor with respect to that contract that was reduced from 800 to 400 million? A. One of the entities in the Odebrecht group."

CONFIDENTIAL

Ombudsman's Office, and/or regulatory bodies. 186-187

70. The breakdown of the number of ICFR and operational/compliance audits by year is shown in **Table 3** below.

Table 3
Breakdown of Operational and SOX Audits

	Percentage of Total Audits					
Macro-Process	2010	2011	2012	2013	2014	
Operation and Higher Management	66%	67%	65%	65%	61%	
Internal Control (SOX)	34%	33%	35%	35%	39%	

Source: Petróleo Brasileiro S.A. – Petrobras 2010 - 2014 Annual Report of Internal Audit Activities, Section 2.1.C.2., [PBRCG_01076070 (2010); PBRCG_01076218 (2011); PBRCG_01070506 (2012); PBRCG_01073080 (2013); PBRCG_00806899 (2014)].

- 71. Each year, Internal Audit presented its audit plan to the Audit Committee, who evaluated the scope, provided recommendations, and ultimately approved the plan. Internal Audit regularly provided updates to the Audit Committee, discussing progress on its audit plan, identified deficiencies, and remedial actions.
- 72. Dr. Henning suggests that the communication of deficiencies identified as a result of such audits were red flags, and criticizes Petrobras and its CFO for not "launching an investigation" in

¹⁸⁶ For example: Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, [PBRCG-P_02283348 at p. 5], "c) Other works could be added to the originally planned list (Annex I), in the face of: [1] follow up / monitoring activities mentioned in previous items; [2] obtaining information updated subsequently to the elaboration of this Plan, in view of the restrictions outlined in item V. to; [3] requests of the Senior Management, Audit Committee and Executive Management; [4] outcomes / extensions of scheduled works; and [5] claims from the OMBUDSMAN through the Reporting Channel established in the Company in compliance with the requirements of the Sarbanes-Oxley act."

¹⁸⁷ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 54th Audit Committee Meeting, September 27, 2012, [PBRCG_00721665 at p. 5], "The Internal Audit Executive Manager, Gerson Luiz Gonçalves, in observing Board Member Sergio Franklin Quintella's comment, informed that all the CGU and TCU communications are made via Official Letter, forwarded to Internal Audit."

Petróleo Brasileiro S.A. – Petrobras 2010 Annual Plan of Internal Audit Activities, [PBRCG-P_01920738]; Petróleo Brasileiro S.A. – Petrobras 2011 Annual Plan of Internal Audit Activities, [PBRCG-P_02103081]; Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, [PBRCG-P_02283348]; Petróleo Brasileiro S.A. – Petrobras 2013 Annual Plan of Internal Audit Activities, [PBRCG_01379925]; Petróleo Brasileiro S.A. – Petrobras 2014 Annual Plan of Internal Audit Activities, [PBRCG_01387547]; Petróleo Brasileiro S.A. – Petrobras 2015 Annual Plan of Internal Audit Activities, [PBRCG_00766727].

¹⁸⁹ For example: Petroleo Brasileiro S.A. – Petrobras, Minutes of the 57th Audit Committee Meeting, February 4, 2013, p. 6, [PBRCG_01267170–85] , "Board member Sergio Quintella asked the Manager how, in terms of relevance, the allocation of hours is determined for investment projects in relation to the goods and services audits. The Manager answered that both are the most relevant ones, holding 44% of the anticipated hours. The investment projects audits consider the analysis of the project and the physical and financial execution; the goods and services audits consider the contracts, including measurement bulletins, up to payment."; p.15, "III. DELIBERATIONS. 1) Internal Audit – Internal Audit Annual Activities Plan for 2013. The Audit Committee approved the delivery of the Internal Audit Annual Activities Plan to the Board of Directors."

¹⁹⁰ For example: Petroleo Brasileiro S.A. – Petrobras, Minutes of the 46th Audit Committee Meeting, August 24, 2011, [PBRCG_00712348 at p. 4], "1) Report of the Activities of the Internal Audit from the 2nd trimester of 2011 by the Executive Manager of the Internal Audit Gerson Luiz Gonçalves."

response to internal audit's reports.¹⁹¹ This mischaracterizes the routine nature of such communications and ongoing processes at Petrobras to identify key risks, test controls, and remediate deficiencies. This also ignores the fact that a core function of Internal Audit was to recommend and follow-up on the remediation of deficiencies its audits uncovered and that information about such remediation was also communicated in Internal Audit reports.¹⁹²

73. For example, Internal Audit presented to the Audit Committee in March 2013 that: 166 audits were carried out, 77 of which (46%) were connected with Internal Controls - SOX and 89 (54%) were about Operational and Management Matters. 436 nonconformities were detected, 37 of which were highlighted in the Activities Report and briefly commented on in 13 items; of all of them, 5 (38%) have been closed and 8 (62%) are in the process of being corrected 193

Internal Audit then discussed the instances of non-compliance and planned remediation in further detail.¹⁹⁴

74. Upon completion of its audit plan, Internal Audit issued a formal report that summarized its testing results, correspondence with regulatory bodies, and recommendations for management. ¹⁹⁵ Internal Audit also presented its annual audit plans and periodic updates to Petrobras's Executive Board, independent auditors, and regulatory bodies. ¹⁹⁶

¹⁹¹ Expert Report of Steven L. Henning, Ph.D., CPA, p. 1-36, "A summary of the minutes for the 59th meeting of the audit committee on March 14, 2013 identifies that, in the third quarter of 2012, Petrobras' internal audit team identified 436 items in which the Company was not compliant with its own internal policies. Rather than launching an investigation or organizing a team to address the controls deficiencies that led to the noncompliance, Mr. Barbassa simply ignored the findings. In fact, Mr. Barbassa testified that, although he was Petrobras' Chief Financial Officer at the time, he had no recollection of learning of these numerous issues, which included certain items related to Odebrecht, a member of the cartel."

¹⁹² Almir Guilherme Barbassa Deposition, April 12, 2016, 199:21-200:15, "Q. Would you receive reports from internal audit that contained information in sum or substance similar to what we have seen here on Barbassa 24?...A. There was a certification process from SOX that contemplated the audit of the -- the work of internal audit. In verifying the control points there were many, thousands at Petrobras, and those that were found with some kind of non-compliance were reported to the process and for those people in charge that were involved, so that appropriate adjustments could be made. So once the audit was done, it would report to each area the respective points, and those areas would work towards a solution. What this is showing is a summary of that work, which is an ongoing phase of the process."

¹⁹³ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, [PBRCG_00727994 at p. 3].

¹⁹⁴ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, [PBRCG_00727994 at p. 3-13]. *For example*: p.7, "The Manager went on to address the main nonconformities."

Petróleo Brasileiro S.A. – Petrobras 2010 Annual Report of Internal Audit Activities, [PBRCG_01076070]; Petróleo Brasileiro S.A. – Petrobras 2011 Annual Report of Internal Audit Activities, [PBRCG_01076218]; Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, [PBRCG_01070506]; Petróleo Brasileiro S.A. – Petrobras 2013 Annual Report of Internal Audit Activities, [PBRCG_01073080]; Petróleo Brasileiro S.A. – Petrobras 2014 Annual Report of Internal Audit Activities, [PBRCG_01387547]; Petróleo Brasileiro S.A. – Petrobras 2015 Annual Report of Internal Audit Activities, [PBRCG_00806899].

¹⁹⁶ For example: Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, [PBRCG_01070506-PBRCG_01070662 at p. 2], "Some of the reviews are related to the evaluation and certification of the internal control environment, in line with the requirements of Sarbanes-Oxley (SOX). In addition to the above, as in previous years, a significant portion of the work concerns unscheduled reviews that were aimed at addressing demands on the Audit Committee from senior

75. Petrobras's Internal Audit played a significant role in the implementation of the Petrobras Corruption Prevention Program ("PCPP"). Internal Audit, along with the SOX Certification Group, General Ombudsman's Office, and others at Petrobras, led the efforts to create the PCPP and worked to identify best practices of other large companies to implement at Petrobras. The PCPP was approved by the Executive Board in July 2013 and by the Board of Directors in November 2013. 199

9. General Ombudsman's Office

76. Established in October 2005, the General Ombudsman's Office reported directly to the Audit Committee and served as the official channel for receiving and responding to complaints regarding potential violations of ethical principles, policies, standards, laws and regulations, or other improper conduct.^{200,201} Effective April 2010, the Board of Directors approved a two-year

management, Executive Management and the Ombudsman, as situation aligned with the main objective of this AUDIT of advising senior management in the control of the main activities of the Petrobras Group in Brazil and abroad, in an effective, integrated and strategic way. AUDITING also participated in Working Groups, Petrobras Professional Training Programs, Forums, Committees, Commissions and Processes requiring continuous coordination with the Control Bodies, mainly the Federal Audit Court (TCU), Federal Comptroller General (CGU) and the Audit Board."; Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, p. 3, [PBRCG-P_02283348], "The scope of processes deserving examination is defined from the risk mapping and relevance necessary for the evaluation of the internal control environment, and that has the participation of this INTERNAL AUDIT, from the Corporate Finance Area and the External Auditing Company responsible for certification of the Company's control."

¹⁹⁷ Gerson Luiz Gonçalves Deposition, February 19, 2016, 162:13-21, "A. Petrobras has always tried to be align with the best controlling practices, so as soon as the Sarbanes-Oxley law came about, we tried to adapt ourselves. We created an ombudsman, we created the auditing committee, and we created the internal controls division, and with the evolution because it is a dynamic process, we created the code of ethics in line with the other companies, other large worldwide corporations..."; 164:5-9, "A. In order to create this program, we created a benchmark with various different large companies, and then after this we created our own program based on the best practices of these large corporations."

¹⁹⁸ Communication of the Decision of the Board of Directors, Petrobras Anti-Corruption Program and Implementation, July 4, 2013, [PBRCG_01566308 at p. 4], "The composition of the Working Group included with the participation of representatives of the following units: INTERNAL AUDIT, CORPORATE COMMUNICATIONS, FINCORP /GCC (previous FINCORP /CI), GAPRE, GAPRE /SE, LEGAL, GENERAL OMBUDSMAN, HUMAN RESOURCES, INFORMATION TECHNOLOGY and TELECOMMUNICATIONS and the Company ETHICS COMMITTEE."

¹⁹⁹ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 69th Audit Committee Meeting, December 5, 2013, [PBRCG_01155009 at p. 10], "On July 4, 2013, the Corruption Prevention Program was approved by the Petrobras Executive Board. Approval of the Program and the unit responsible for operating it was being submitted to the Board of Directors in November 2013. In 2014, the effectiveness of the Program must be reviewed."; Petrobras, "Petrobras Corruption Prevention Program," December 2014, available at http://www.petrobras.com.br/en/about-us/profile/transparency-and-ethics/, preface, "Attentive to constant changes in global conditions and aware of the impact of our activities in the economic, social and environmental spheres, we have created the Petrobras Corruption Prevention Program (PCPP), approved by the Executive Board (minutes of Executive Board meeting 5,047, July 4, 2013, item 28, subject number 820) and ratified by the Board of Directors at the same time as approving the creation of the Compliance General Management (minutes of Board of Directors meeting 1,386, November 29, 2013, item 2, subject number 56)."

²⁰⁰ For example: Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 106, "The Petrobras General Ombudsman's Office has been an official part of our corporate structure since October 2005, when it became directly linked to the board of directors. The General Ombudsman's Office is the official channel for receiving and responding to denunciations and information regarding possible irregularities in accounting, internal controls and auditing. The General Ombudsman's Office reports directly to the Audit Committee and guarantees the anonymity of informants. In December 2007, the board of directors approved the Policies

term for the Ombudsman Officer, "during which he cannot be discretionarily dismissed by the management, ensuring its independence in performing his duties." Paulo Otto von Sperling served as Ombudsman through the majority of the Relevant Period.²⁰³

77. The General Ombudsman's Office utilized the Petrobras Portal website, where employees could anonymously report complaints.^{204,205} Employees and individuals outside of Petrobras could also communicate anonymous complaints via telephone and email channels.²⁰⁶ The General Ombudsman's Office centralized the receipt of complaints, analyzed their nature, sorted them into categories, and utilized other departments to perform the investigation. In

and Directives of the Petrobras Ombudsman, which was an important step in aligning the General Ombudsman's practices with those of the other ombudsmen office in the system, contributing to better corporate governance. In April 2010, the board of directors approved a two-year term (renewable once) for the Ombudsman Officer, during which he cannot be discretionarily dismissed by the management, ensuring its independence in performing his duties." *See also*: Petróleo Brasileiro S.A. – Petrobras 2010, 2011, 2013, 2014 Form 20-F, p. 123, pp.122-123, p. 107, p.126, respectively (each include similar language.)

²⁰¹ Petrobras, "Petrobras Corruption Prevention Program," December 2014, available at http://www.petrobras.com.br/en/about-us/profile/transparency-and-ethics/, p. 16, "CHANNELS FOR ALLEGATIONS, COMPLAINTS, REQUESTS, SUGGESTIONS AND COMPLIMENT: We provide secure and reliable communication channels, encouraging our employees and other stakeholders to record any situation indicating a known or potential violation of ethical principles, policies, standards, laws and regulations, or other improper conduct. The General Ombudsman Area, which reports to the Board of Directors, is the area responsible for handling demands submitted by our employees or other stakeholders and reporting the results achieved to the Audit Committee. We preserve the anonymity of people making allegations and we consider acts of retaliation to be improper conduct, which if identified may result in disciplinary penalties."

²⁰² For example: Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 106, "In April 2010, the board of directors approved a two-year term (renewable once) for the Ombudsman Officer, during which he cannot be discretionarily dismissed by the management, ensuring its independence in performing his duties."

²⁰³ For example: Petroleo Brasileiro S.A. – Petrobras, Minutes of the 46th Audit Committee Meeting, August 24, 2011, [PBRCG_00712348 at p. 1]; Petroleo Brasileiro S.A. – Petrobras, Minutes of the 65th Audit Committee, September 4, 2013, [PBRCG_00728395 at p. 4], "The Petrobras General Ombudsman Paulo Otto von Sperling submitted the SOX Report on Charges."; Petroleo Brasileiro S.A. – Petrobras, Minutes of the 77th Audit Committee, July 2, 2014, [PBRCG_01286158 at p. 8], "4) Balance of the General Ombudsman of 2013 for the General Listener of the Petrobras Paulo Otto von Sperling."

²⁰⁴ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 71st Audit Committee Meeting, January 23, 2013, [PBRCG_01155335 at p. 36], "The General Ombudsman receives denouncements / complaints through various channels. Given the requirements of the Sarbanes-Oxley Law (SO[X]), Petrobras' General Ombudsman is the official channel for communication of irregularities or fraud in relation to accounting activities, internal controls or internal and external audit. In accordance with SO[X] requirements, Petrobras created the Reporting Channel, through which any member of the workforce can report irregularities on which they possibly have knowledge of. Anonymity is guaranteed and the Reporting Channel can be accessed through the Petrobras Portal (Company's Intranet). The system was developed gathering all the security features so that the identity of the denunciator / complainant and the confidentiality of their complaint is upheld. To access the Reporting Channel, copy the address https://canaldenuncia.petrobras.com.br and paste it into a new window of your browser."

²⁰⁵ For example: Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 106, "The General Ombudsman's Office reports directly to the Audit Committee and guarantees the anonymity of informants."

²⁰⁶ Petrobras General Ombudsman Overview, [PBRCG_01780712 at p. 7], "The General Ombudsman is also the official channel of Petrobras for the communication of irregularities or frauds with respect to the activities of countable nature, internal controls or auditorship. Taking care of to the requirements of the law Sarbanes-Oxley, Petrobras created the Channel for Complaints, that can be had access by all the force of work (contracted employees and) of the Company through the Intranet. The external public also has guaranteed the confidential treatment of complaints made for email, fax, telephone or letter."; pp. 11-12, "Diverse forms exist to enter in contact with the General Ombudsman: site of Petrobras, telephone, letter, fax or email. To be taken care of personally by one of our assessors, it is the necessary to make scheduling for the telephone. Internet http://Ombudsman.petrobras.com.br Email Ombudsman@petrobras.com.br Telephone (21) 3224-6666 Fax (21) 3224-8189 Internally Key PROU Letter General Ombudsman of Petrobras Av. Republic of Chile, 65 11° to walk - room 1101A Center - Rio Janeiro – Brazil CEP 20031-912 - RIO DE JANEIRO."

addition, the General Ombudsman's Office monitored the progress and status with respect to each complaint, ultimately consolidating information about ongoing and completed investigations and any remediation.²⁰⁷ For example, as shown in **Table 4**, in 2014, complaints were handled by different groups at Petrobras as follows:²⁰⁸

Table 4
Groups that Handled Complaints at Petrobras

Group	Nature of Complaint
Corporate Security	Theft, deviation or tampering of products, tips, and improper use of the Petrobras image.
Various Management Areas	Improper application of the internal procedures for promotion and level of advancement, discrimination, abuse of power, harassment, environmental damages, and violation of the rules of health and safety.
Internal Audit	Irregularities and fraud concerning the operational and financial activities of the company, records or accounting practices, the internal controls and internal and external audit activities, irregularities in biddings or in the contracts, embezzlement etc.

Source: Petrobras, "Handling Complaints," Code: PE-4QO-00001, [PBRCG_01780841]

78. The General Ombudsman's Office also communicated with regulatory bodies and implemented their recommendations. For example, Brazil enacted the *Access to Information Law* ("LAI") in November 2011, which regulated the right of access to public information in an effort towards greater government transparency in Brazil.²⁰⁹ The LAI stated that "all information produced or held in custody by the government and not classified as confidential must become accessible to all citizens" and applied to "public entities...directly or indirectly controlled by the Brazilian federal government, which includes Petrobras."²¹⁰ The General Ombudsman's Office,

²⁰⁷ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 71st Audit Committee Meeting, January 23, 2014, [PBRCG_01155335 at p.12], "Then, the Coordinator André mentioned the Ombudsman's assignments: [1] Coordinate the official Denouncement Channel of the Company in order to meet the requirements of the Sarbanes-Oxley Act; [2] Centralize the receipt of denouncements of fraud and corruption; [3] Analyze the denouncements of fraud and corruption received; [4] Monitor the arrangements arising from denouncements to the organizational units; [5] Contribute to the information of the activities for the consolidation of the periodic report to Top Management."

²⁰⁸ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 71st Audit Committee Meeting, January 23, 2014, [PBRCG_01155335 at p. 14], "Around 40% of denouncements are analyzed with in Internal Audit, 40% is analyzed by Gapre and 20% are analyzed by Materials (10%) and the remaining direct by the areas." Gapre is the office of the executive at Petrobras; Marcos Panassol Deposition, April 19, 2016, 89:12-14, "So that's the manager within what they call GAPRE, G-A-P-R-E. That's the CEO's office."

²⁰⁹ Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 106, "In November 2011, the Brazilian federal government enacted the Public Access to Information Law (Law No. 12,527/2012), which regulates the constitutional right for people to have access to public information."

²¹⁰ Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. 106-7, "This law states that all information produced or held in custody by the government and not classified as confidential must become accessible to all citizens. The extension of this law encompasses public entities that are directly or indirectly controlled by the Brazilian federal administration, which includes Petrobras. In April 2012, Petrobras' CEO, Ms. Maria das Graças Foster, appointed the General Ombudsman as the authority responsible for implementing this law within the Company. Now, the General Ombudsman's Office has to perform new tasks,

along with the Audit Committee, considered the challenge in implementing the LAI given that Petrobras is both a government entity and a competitor in the market.²¹¹ As a result, the General Ombudsman's Office regularly communicated with the CGU to discuss and clarify concepts regarding access to information at Petrobras²¹² and was required to complete the CGU's annual questionnaire about the LAI.²¹³ In addition, in response to the LAI and to improve the accessibility of the General Ombudsman Office, Petrobras created local Ombudsman positions with reporting channels to regional coordinators.^{214,215}

79. The General Ombudsman's Office regularly presented to the Audit Committee on the complaints it received, its monitoring of whistleblower complaints, communications with regulatory bodies, and compliance with relevant laws and regulations.²¹⁶ These presentations

such as ensuring compliance with the rules on access to information by the public, monitoring the implementation of this law and submitting periodic reports to the Board of Directors, as well as making recommendations and providing guidance to Petrobras' business units with respect to the enforcement of the law."

²¹¹ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, [PBRCG_01260715 at p. 12], "Board Member Quintella noted that, at his opinion, the Law is intended to apply to a governmental agency and not a corporation like Petrobras. Therefore, it is important that the Ombudsman's Office notifies the Legal Unit and promotes a serious discussion for a clear distinction between the application of the law to a governmental agency and its application to Petrobras, which is an entity under governmental control, but also a corporation which competes in the market. He also highlighted, as an example, the existence of matters classified as private by CVM. Certainly, there are moments of absolute secrecy. All this should be taken into account, be properly listed and included in the Law of Access to Information (LAI), so that the company is not harmed by the disclosure of certain information."

²¹² Petrobras Improvements to the General Ombudsman's Office, [PBRCG_01780774 at p. 6], "The Executive Direction approved, in 10/05/2012, the organizational adjustments proposed by Ombudsman-General for the functioning of the Information service the Citizen (SIC), in fulfilment to the Law of Access Information (LAI). They were created the Management of Transparency and Information, the Coordination of Active Transparency, Coordination SIC and the Coordination of Joint and Resources with dedicated functions to the process of management of the access to public information. Listener-General was designated as monitoring authority, in the terms of article 40 of the Law and stayed responsible for its implementation and monitoring in Petrobras. Before the advent of LAI Petrobras divulged in the Portal of the Public Transparency the relative data to the budgetary and financial execution, acts of contract and accords, beyond the expenses with daily tickets and, in fulfilment to Decree 5,482/2005 and Would carry Inter-ministerial no 140/2006. However, from LAI that brought the obligatoriness to give advertising to other information of the state-owned companies, Ombudsman-General became it responsible for the new Portal of Transparency."

²¹³ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, [PBRCG_01260715 at p. 14], "Then the Ombudsman commented on the duties of the responsible authority, Article 40 of the Law of Access to Information. I. to ensure compliance with the rules on access to information II. to monitor the implementation of the law and submit periodical reports III. to make recommendations regarding compliance with the law IV. to guide units with respect to compliance with the law."

²¹⁴ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 49th Audit Committee Meeting, February 28, 2012, [PBRCG_01377838 at p.13], "The Ombudsman Paulo Otto started his presentation about the Balance of General Ombudsman of 2011 commenting on the general information of the General Ombudsman Office of Petrobras and referencing the actions taken by the unit to increase the accessibility to the General Ombudsman Office (Annex III – Balance of the General Ombudsman Office of 2011):...Restructuring with local ombudsman offices..."

²¹⁵ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, [PBRCG_00727994 at p. 20], "Then, the Ombudsman mentioned the changes to the General Ombudsman's Office's website in order to comply with the Information Access Act, informing that the Ombudsman's Office has brought the Public Transparency Portal to its website. Local Ombudsman's Offices are 18 units, nine of which were opened in 2012. This decentralization movement allows to perform local assistance, making it possible to solve many claims in the same place where they originated."

²¹⁶ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, [PBRCG_01260715 at p. 10-11], "Paulo Otto, the General Ombudsman, started his presentation on the Law of Access to Public Information - LAI...";

included information about the nature of the complaints received. For example, the General Ombudsman's Office presented a summary of complaints at the May 24, 2012 Audit Committee meeting:

Coordinator Ana Baudel began her presentation on the Review of SOX Demands reporting that 235 complaints classified as SOX or damage to property were received in the quarter, and mentioned that most demands are related to outsourced companies...Then she presented the 235 complaints classified per subject, to wit:

- 192 Contractors
- 27 Agreements
- 8 Bidding Processes
- 5 Sponsorships
- 2 Damage to property
- 1 Internal Control²¹⁷
- 80. In his report, Dr. Henning criticizes the effectiveness of the whistleblower channel based on testimony from Mr. Cunha, who claimed Petrobras "had not received any significant information on corruption problems." Dr. Henning relied solely on the testimony and recollection of Mr. Cunha and apparently did not verify or validate Mr. Cunha's assertion. Mr. Cunha's testimony is belied by documents reflecting that the Ombudsman, in fact, received complaints relating to corruption, which complaints were then investigated and reported on to the Audit Committee.
- 81. For example, the General Ombudsman presented an update in the June 12, 2013 Audit Committee meeting, which Mr. Cunha attended, that included an accusation that employees were collecting bribes from service provider representatives.²¹⁹ The General Ombudsman indicated

p.16 "3) Review of SOX Demands -1 st quarter of 2012 by the Complaints Coordinator of the Petrobras General Ombudsman's Office, Ana Claudia Abreu Baudel."

²¹⁷ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, [PBRCG_01260715 at p. 16-17].

²¹⁸ Expert Report of Steven L. Henning, Ph.D., CPA, pp. 1-14 - 1-15, "Mr. Cunha testified to his disbelief that such egregious disregard for internal controls could have gone completely unreported through the Company's whistleblower hotline, a further testament to the poor control environment cultivated by Petrobras executive management:

^{&#}x27;Over the course of my stay at the audit committee it was striking that we had not received any significant information on corruption problems. Throughout 2014 it struck me that I found the answer, and that was that the person in charge of the whistle blowing channel happened to be the former aide of the chief of staff of government who is now in jail... That was Mr. Otto, Paulo Otto Spurling. From statements of board member Sinedino repeatedly on the board and I believe on the minutes, he said that employees of Petrobras didn't feel safe by blowing the whistle, and it is understandable if the channel is managed by people who as we now see is implicated in the scandal."

²¹⁹ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 62nd Audit Committee Meeting, June 12, 2013, [PBRCG_00727179] at p. 3], "The Audit Committee, at the start of the meeting, received its new member, the Director Mauro Gentile Rodrigues da Cunha,

that a CIA identified proof of non-compliance and, as a result, multiple employees were terminated.²²⁰ This example would have reasonably suggested to Petrobras Leadership that the whistleblower channel was operating effectively.²²¹ I discuss the CIA process in detail in Section VIII.A.11 below.

10. Legal

82. The Legal department was separate from the General Ombudsman's Office and was not involved in the handling and monitoring of complaints.²²² It reviewed legal matters at Petrobras and reported to the Office of the President.²²³ More specifically, all contracts submitted to the Executive Board and the Board of Directors required a legal opinion.²²⁴ In addition, a member of Legal was required to be involved in an administrative support role in all CIAs, unless the investigation itself related to a legal matter.²²⁵

in his first meeting."; p. 22, "2) Balance of the SOX Claims -1^{st} quarter of 2013 by the General Ombudsman of Petrobras Paulo Otto von Sperling."

²²⁰ 30(b)(6) deposition of Petrobras by Carlos Alberto Rechelo Neto, May 3, 2016, Exhibit 7, General Ombudsman of Petrobras Presentation at the 62nd Meeting of the Audit Committee, June 12, 2013, [PBRCG_01276590], "Summary: Accusation that the employees may be collecting bribes from the service provider representatives, being at risk being declassified or of not being invited to participate in bidding procedures. Upshot: An Internal investigations Commission was created, whose tasks recorded the involvement of the Company in the corruption dynamic established between buyers, management and provider representatives. In their conclusions, the CIA understood the weaknesses to be proven in the control of acquisitions done by the managing Department, on the question and the existence of illicit relationships between the employees cited and some providers. They further reported that there was proof of noncompliance with the Company's normative standards, and with the Code of Ethics on the part of the accused. One employee was fired for just cause; another two at the Company's discretion. A fourth employee requested his retirement during the course of the investigation process."

²²¹ During the course of my work I also became aware of a whistleblower complaint in April 2009 that alleged employee misconduct, including bribes, at Petrobras. The General Ombudsman directed the complaint to Internal Audit, who investigated the matter and issued two audit reports in 2009 that identified instances of non-compliance. Petrobras established a CIA and, based on the investigation, certain employees were discharged or otherwise punished. While this occurred before the Class Period, it provides another example that would have reasonably suggested to Petrobras Leadership that the whistleblower channel was operating effectively. 30(b)(6) deposition of Petrobras by Carlos Alberto Rechelo Neto, May 3, 2016, 60:7-61:19.

²²² Nilton Antonio de Almeida Maia Deposition, April 14, 2016, 176:16-21, "Q. So do you remember if the legal department conducted an investigation into the allegations that are set forth in this e-mail? A. The legal department does not conduct investigations. There is specific areas in Petrobras that do the investigations."

²²³ Carlos Cesar Borromeu Deposition, April 25, 2016, 22:8-12, "Just to make it clear for you, the legal department answers to the president of Petrobras, and one of the divisions, one of the departments of the department was the international legal department where I worked."

²²⁴ Carlos Cesar Borromeu Deposition, April 25, 2016, 13:15-20, "A. Every transaction that was supposed to be submitted to the executive board of directors of Petrobras and to the board of directors of Petrobras required to be presented with a legal memo from our department. So we were in charge of preparing legal memos on these transactions."

²²⁵ Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at pp. 4-5], "6.5 The Legal Department 6.5.1 Support and technically instruct, and may be a member of the Internal Investigation Commission, when relevant...7.1.4 The members of the Legal Department and of GAPRE/SE must not participate in the Commissions in the role of Coordinator, except if the investigation is caused by a possible irregularity in these management areas, or if, by determination from the President's Office. 7.1.5 Submit the draft of the Final Report to the Legal Department for appraisal and any suggestions regarding legal suitability."

11. CIAs

83. Petrobras maintained a standard process for using CIAs to investigate potential problems or irregularities, including in connection with complaints received through the Ombudsman's Office and at the request of management. When a potential non-conformity was suspected, Petrobras policy indicated that management had a duty to investigate:

It is the duty of the Company's whole management body, whenever they come across with facts or acts that may constitute a non-conformity, to investigate, preliminarily, always observing the principle of the immediate action, and, in case they are not able to achieve the full explanation of the event, an Internal Investigation Commission [CIA] must be established.²²⁸

84. General managers (and their superiors) had the authority to initiate CIAs^{229,230} and to appoint members to the investigation team.²³¹ The CIA team was comprised of multiple parties, including those in managerial roles at Petrobras, employees knowledgeable about the at-issue process, the Legal Department, and often a member of Internal Audit.^{232,233} The CIA team could

²²⁶ 30(b)(6) deposition of Petrobras by Marcio Polito Fontes, September 28, 2015, 10:7-21, "Q. How are investigations commenced at Petrobras? A. How does an investigation is initiated at Petrobras? An investigation could basically be initiated in three different ways. Because of a complaint that comes from auditing. MR. MARTINI: Ombudsman. THE INTERPRETER: Ombudsman. That was not my question. What I said before from a complaint that comes from the ombudsman. A. The second one when the area of Petrobras, the management, requests corporate security, the initiation and investigation, and the third means is when it comes through a complaint made in the press."

²²⁷ Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at p.1], "This standard aims at providing for the establishment and conduct of the Internal Investigation Commission whose purpose is to verify suspicion or occurrences against the company's workforce and/or property, as well as subsidize administrative measures and resulting procedures."

²²⁸ Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at p.1].

²²⁹ Gerson Luiz Gonçalves Deposition, February 19, 2016, Exhibit 6 B, p. 18, "An internal accounting commission is established when there is a necessity for some type of investigation, to ascertain some responsibility about something or for some fact that has been raised, or until raised by its own audit. Then yes, the accounting internal commission is designated by a director or by more than one director of by the president and there has, already there is a prerogative to do, take deposition and reach conclusion and report the conclusions to the directorate so that the directorate to take the appropriate action."

²³⁰ Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at p. 3], "6. ASSIGNMENTS, 6.1 The authority of the General Manager level or higher, 6.1.1Determine, by means of the DIP, the establishment of the Internal Investigation Commission, defining its purposes and the term for conclusion of the works, appointing the Coordinator and the other members of the Commission."

²³¹ Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at p. 3], "6. ASSIGNMENTS, 6.1 The authority of the General Manager level or higher, 6.1.1Determine, by means of the DIP, the establishment of the Internal Investigation Commission, defining its purposes and the term for conclusion of the works, appointing the Coordinator and the other members of the Commission."

²³² Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at p. 4], "7.1 Establishment of the Commission 7.1.1 The Coordinator shall, preferably, have a managerial role in the Company. 7.1.2 At least one of the members of the Commission must be an employee who has good knowledge about the processes or other particular characteristics related to the environment where the case under investigation is inserted. 7.1.3 Request from the Legal Department to appoint a professional to offer support to the works (in case this is deemed necessary)."

²³³ Gerson Luiz Gonçalves Deposition, February 19, 2016, 53:23-25, "Q. So if I use the term 'CIA,' you will understand it to refer to that? A. Yes. I have been part of many of them."

review relevant company documents and company emails and interview key employees,²³⁴ and would ultimately issue a report that summarized its conclusions and recommendations to the party that formalized the CIA as well as the Corporate Security department.^{235,236} Also, the CIA team could recommend disciplinary measures in the form of warnings as well as suspensions, and terminations in employment.²³⁷

B. Relevant Parties Outside Petrobras's ICFR system

1. Regulatory Bodies

85. As discussed above, the TCU is an advisory body of the Brazilian Congress that performs external audits of the Brazilian executive branch,²³⁸ including parties that received federal funds.²³⁹ The CGU is an advisory body of the Brazilian executive branch that is "responsible for

This included current and former employees. *For example*, the list of individuals interviewed in the Comperj CIA included former Petrobras employees. PwC, Forensic Services Memo Review of Management's Investigations (CIAs), March 20, 2015, pp.49-51. [PwCBR PETRO 000135739–890]

²³⁵ Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at p. 3], "6.1.5 Shall inform GAPRE's Corporate Security Management (facts occurred outside the State of Rio de Janeiro, the report shall be made to GAPRE/SE's Regional Manager), within 30 days from the receipt of the Final Report, about the arrangements taken regarding the investigated case."; p. 7. "10. Final Report."

²³⁶ Gerson Luiz Gonçalves Deposition, February 19, 2016, 51:10-18, "A. I spoke about the first phase, the first part, which is to find a reason for that particular case. On the secondhand, if on the second phase, if we investigate, we see there is either bad faith or an indication of favoring one company over the other, the auditing division creates a CIA. Not create actually, recommends the creation of one, and as a result of that CIA, employees may be dismissed." 54:19-55:19, "Q. Are CIA reports sent to internal audit pursuant to a policy that Petrobras has?...Q. At any time. A. As far as I remember, corporate security, the corporate security division, corporate security division which has changed names now, every time a CIA is created, they need a file number, they need to get a file number from the corporate security department. So all CIA's that are created, they have to be forwarded to, I have to remember the name, the constituent authority, who is the person who created that specific CIA. So the CIA report or the results are forwarded then to the constituent authority and then the corporate security division files those CIA's. Q. Does internal audit get a copy of the CIA? A. No...Q. Your answer is no? A. It depends on the situation. If there is an auditor taking part in the CIA and then the auditing division becomes, gets information about it."

²³⁷ Disciplinary Regime, Petrobras, "Disciplinary Regime," Code: E-0V4-00032-A, [PBRCG_00262067 at p. 12], "6.3. Internal Commission Calculation. a. It is up to the holder of the unit to determine the Internal Investigation Commission. b. Will be created: [1] Where necessary, for determination of disciplinary situation whose complexity does not permit the immediate application of a possible sanction, and must be composed of a representative of the HR management, an employee of the unit with managerial function and a management employee representative. [2] When a complaint is made in order to ascertain clues or instances against the labor force and/or the company's heritage, as well as subsidizing administrative measures and procedures...6.4. Disciplinary measures. In the application of disciplinary penalties provided for in item 6.4.1 of this standard and in item 6.4.2 the [PP-0V4-00027 of Labor Relations are considered the employee's history, the nature and gravity of the fault, the damage that come to the unit or to the company and, especially, the circumstances in which the foul was committed, which may exacerbate or mitigate it. 6.4.1. Penalties. The employee is subject to one of the following penalties: [1] Warning; [2] Suspension; [3] Termination of the Labor Contract."

²³⁸ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 9 "The Tribunal de Contas da União (Federal Auditor's Office), or TCU, is an advisory body of the Brazilian Congress, responsible for assisting it in matters related to the supervision of the Brazilian executive branch with respect to accounting, finance, budget, operational and public property (patrimônio público) matters."

²³⁹ "Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of São Paulo," The World Bank, December 2010, p.49, "TCU serves as the external auditor, based on its Constitutional mandate and is responsible for validating the accounts of all agencies implementing Federally-funded contracts," available at

assisting in matters related to the protection of federal public property and the improvement of transparency in the Brazilian executive branch, through internal control activities, public audits, and the prevention and combat of corruption, among others."²⁴⁰

86. GAPRE communicated with regulatory bodies and utilized staff from both the Internal Audit and Legal departments to assist in coordinating TCU and CGU audits. For instance, Internal Audit attended planning sessions with the regulatory bodies, coordinated the audits, and monitored compliance with the recommendations and findings.²⁴¹ It regularly communicated with regulatory bodies to answer questions, provide documents, and clarify issues that arose during audits, regardless of materiality.²⁴² Therefore, a concern raised by the TCU in a communication or preliminary report would "not necessarily [be] a conclusion that there was a noncompliance in that process."²⁴³ In fact, this would be indicative of the customary TCU audit process:

There is a customary process between TCU and the company, in any state company in which TCU would review, ask question, send requests and whenever they identify the need to clarification, they would send those documents, the request to the company. So that's a [back and forth] process. That is not in itself ended until there is a final ruling by TCU that there was any noncompliance proceeded by the company.²⁴⁴

87. Communications with regulators were summarized and incorporated into the annual

http://siteresources.worldbank.org/INTPROCUREMENT/Resources/278019-1311363656902/Brazil OECD Indicators Proposed Scores June-07-2011(editor+clean).pdf.

²⁴⁰ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 7, "The Controladoria Geral da União (General Federal Inspector's Office), or CGDU, is an advisory body of the Brazilian Presidency, responsible for assisting in matters related to the protection of federal public property (patrimônio público) and the improvement of transparency in the Brazilian executive branch, through internal control activities, public audits, and the prevention and combat of corruption, among others."

²⁴¹ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 54th Audit Committee, September 27, 2012, Annex I - Presentation to the Audit Committee: Relationship with Government Control Bodies 1/1/2012 - 6/30/2012, p. 10 [PBRCG_00721665–74], "Work processes (SINPEP Standards – Petrobras' Integrated Electronic Standards System): 1)Meeting the claims of Government Control Bodies, 2) Complying with FISCOBRAS, 3) Handling the claims of Government Control Bodies, Handling requests for information from the Federal Audit Tribunal, 4) Monitoring the claims of Government Control Bodies, 5) Rendering accounts to Government Control Bodies, 6) Monitoring compliance with the acts promulgated by the Federal Audit Tribunal, 7) Monitor compliance with the recommendations of the Brazilian General Accounting Office."

²⁴² Gerson Luiz Gonçalves Deposition, February 19, 2016, 132:6-17, "A. I have to explain something that is important. TCU establishes like an issue classification. When it says there is no issue, no problems, it repeats. Indications of serious irregularities here. Overpricing and overbilling. In other words, it establishes criteria independent of amounts involved. It does not make a distinction between what is relevant or what is irrelevant. So if it audits an enterprise of \$20 million or if it audits work worth \$20 billion, it uses the same methodology to classify the nonconformities."

²⁴³ Marcos Panassol Deposition, April 19, 2016, 80:25-81: 10, "My testimony is there is a process and we follow that process. We understand the process, gather evidence and what it mentioned was that it's customary for TCU makes requests, the company defends itself and things are sorted out and that will take some time. So a communication by TCU raising a concern, it's not necessarily a conclusion that there was a noncompliance in that process."

²⁴⁴ Marcos Panassol Deposition, April 19, 2016, 80:8-17.

Internal Audit reports presented to the Audit Committee.²⁴⁵ In addition, GAPRE logged all communications with the TCU.²⁴⁶ In connection with its annual audits, PwC reviewed the logs of all communications and, for selected communications at its discretion, the underlying information, specifically to look for indications of irregularities, overpricing or other extraordinary items.²⁴⁷

88. It is also worth noting that, until the Illicit Payment Schemes were revealed in October 2014, the CGU certified each year after its examination of the Company's procedures, that Petrobras's controls complied with CGU regulations and that Petrobras's accounts were "regular."²⁴⁸

2. Independent Auditor

89. Petrobras's independent auditors performed annual audits of Petrobras's financial statements and expressed an opinion on the effectiveness of Petrobras's ICFR. Prior to the Relevant Period, EY served as the independent auditor from 2003 to 2005 as Petrobras began its SOX implementation process. In January 2006, Petrobras engaged KPMG to replace EY as its independent auditor. ²⁴⁹ KPMG audited Petrobras's 2006-2011 financial statements and ICFR.

²⁴⁵ For example: Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, p.11, "3.1 ,[PBRCG_01070506–662 (EN)] Recommendations from the Federal Comptroller General – CGU. 3.2 – Recommendations arising from the Federal Audit Court – TCU."

²⁴⁶ Marcos Panassol Deposition, April 19, 2016, 42:2-11, "Q. And what did PwC do in connection with these communications received from TCU and CGU? Did PwC Brazil review these communications? A. Yes. As documented here, we met with the -- all such communications are addressed to the CEO of the company. So in the CEO's office there is a person there that is in charge of that, of receiving and keeping a log."

²⁴⁷ Marcos Panassol Deposition, April 19, 2016, 42:2-17, "Q. And what did PwC do in connection with these communications received from TCU and CGU? Did PwC Brazil review these communications? A. Yes. As documented here, we met with the -- all such communications are addressed to the CEO of the company. So in the CEO's office there is a person there that is in charge of that, of receiving and keeping a log. So we had access to this person. We had access to the log and we went through the log to identify communications that would have, as described here, could have indications to irregularities, overpricing and extraordinary items. Anything that would draw our attention as auditors."; 45:3-7, "A. If there was any discussion of that in the TCU memos we would need to understand what they relate to, what was the company's response and we would have to assess that as part of our audit."

²⁴⁸ For example: CGU Certification 2012, November 21, 2013, [PBRCG_01119417], "The examinations were done by a selection of items, according to the scope of work defined in the Annual Audit Report of Accounts permanent to this process, in accordance with the applicable federal law of the selected areas and examined activities, and including the results of the control actions carried out during the testing of the examination object, about the management of the audited unit. Related to the examinations accomplished on the selected scope, embodied in the Annual Audit Report of Account no 201315871, I propose the referral of the accounts of those responsible referred to in art. 10 of IN TCU no 63/2010, on pages 02 to 12 of the application, as per regularity."

²⁴⁹ Petróleo Brasileiro S.A. – Petrobras 2005 Form 20-F, p.5. "We are required by Brazilian Corporation Law to change auditors every five years and to select auditors through a bidding process authorized by the Board of Directors. From June 2003 through December 31, 2005, Ernst & Young Auditores Independentes S/S served as our independent auditors and audited our financial statements for each of the years ended December 31, 2005, 2004 and 2003. PricewaterhouseCoopers Auditores Independentes

KPMG was subsequently replaced in 2012 by PwC, Petrobras's current independent auditor.²⁵⁰

- 90. Petrobras's independent auditors were required by PCAOB standards to plan and perform their audits to obtain reasonable assurance whether effective ICFR was maintained in all material respects.²⁵¹ They developed audit plans "based on using a top-down approach that is based on risk, assessment of internal controls, and the application of well-founded professional judgment," and presented the plans to the Audit Committee on an annual basis.²⁵² Petrobras's independent auditors tested and evaluated the design and operating effectiveness of ICFR based on their risk assessment.²⁵³
- 91. Petrobras's independent auditors' procedures also included specific consideration of fraud, as they tested management's evaluation of anti-fraud programs and controls, performed management inquiries, and performed other fraud-specific tests considered necessary. For example, in its 2012 audit plan, PwC stated that its responsibilities related to fraud included:

audited our financial statements for each of the years ended December 31, 2002 and 2001. As of January 1, 2006, we hired KPMG Auditores Independentes to serve as our independent auditors."

²⁵⁰ Petróleo Brasileiro S.A. – Petrobras 2011 Ammended Form 20-F, p. 3, "On January 16, 2012, Petrobras and PifCo signed a contract with PricewaterhouseCoopers Auditores Independentes – PwC, under which PwC was hired to provide specialized technical accounting audit services for the fiscal years ended 2012, 2013 and 2014. As a result of this contract, PwC replaced KPMG Auditores Independentes – KPMG, which provided specialized technical accounting audit services to Petrobras and PifCo for the fiscal years ended 2006 through 2011. KPMG is engaged as the auditor of both Petrobras and PifCo for the fiscal years ended December 31, 2011, 2010 and 2009 until the filling of this Form 20-F with the Securities and Exchange Commission. The change in auditors was made pursuant to regulations of the Comissão de Valores Mobiliários (Securities and Exchange Commission of Brazil, or CVM) that limit the consecutive terms that certain service providers may serve, and not as a result of KPMG's resignation, dismissal or declination to stand for re-election. Because of the limitations set forth in the applicable regulations, neither Petrobras nor PifCo sought to renew KPMG's contract when it expired and KPMG did not attempt to stand for re-election. The replacement of KPMG by PwC was approved by the board of directors of both Petrobras and PifCo as well as by the Audit Committee of Petrobras."

²⁵¹ Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, F-3, "Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects."

²⁵² For example: PwC, Initial Considerations in regards to the 2012 Auditing Plan, February 2012, [PBRCG_01377886 at p.6], "Our audit strategy is based on using a top-down approach that is based on risk, assessment of internal controls, and the application of well-founded professional judgment. These principles allow our audit strategy to be developed and implemented effectively and efficiently."

²⁵³ For example: Petróleo Brasileiro S.A. – Petrobras 2010 Form 20-F, F-3, KPMG Report, "Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk."; Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, F-3, PwC Report, "Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions."

- Plan and execute the audit to provide reasonable assurance that the financial statements are free of material misstatements due to fraud or error
- Assess whether the programs and controls that address the identified risks of material misstatement due to fraud are properly designed and implemented
- Evaluate the process used by management to evaluate the effectiveness of programs and controls against fraud
- Assess fraud of any magnitude perpetrated by management and its impact on the control environment²⁵⁴
- 92. The independent auditors routinely met with the SOX Certification Group to discuss risk assessments, ICFR testing, and control deficiencies to be remediated.²⁵⁵ They also regularly attended Audit Committee meetings and presented updates on their ICFR testing.²⁵⁶ On an annual basis, the independent auditors expressed an opinion on the effectiveness of Petrobras's ICFR and communicated control deficiencies, and their severity, to the Audit Committee.²⁵⁷
- 93. Through year-end 2013, the independent auditors issued opinions that Petrobras maintained, in all material respects, effective ICFR.²⁵⁸ KPMG's and PwC's SOX opinions

²⁵⁴ PwC, Initial Considerations in regards to the 2012 Auditing Plan, February 2012, [PBRCG_01377886 at pp. 8-9],
"Responsibilities on Fraud in relation to the preparation and presentation of financial information and financial statements...Of
the auditor: [1] Plan and execute the audit to provide reasonable assurance that the financial statements are free of material
misstatements due to fraud or error, [2] Assess whether the programs and controls that address the identified risks of material
misstatement due to fraud are properly designed and implemented, [3] Evaluate the process used by management to evaluate the
effectiveness of programs and controls against fraud, and [4] Assess fraud of any magnitude perpetrated by management and its
impact on the control environment...PwC Procedures Regarding Fraud, In order to fulfill our responsibilities regarding the risk
of fraud, we have planned to conduct the following procedures: Question management, the Audit Committee, and others who
have access to the fraud or suspected fraud occurrence reporting process, on how this process is handled by Petrobras. Apply
auditing analysis procedures. Identify and select daily manual entries, intercompany eliminations and other adjustments for the
implementation of testing. Incorporate an element of unpredictability in the selection of the nature, timing, and extent of audit
procedures to be performed annually. Review all critical judgments made by management and evaluate relevant business
transactions to verify business logic."

²⁵⁵ For example: Petroleo Brasileiro S.A. – Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, [PBRCG_01377591 at p. 22], "Regarding the SOX-CVM certification process - Alignment of scope of macro processes – processes, companies and units with PWC."

²⁵⁶ For example: Petroleo Brasileiro S.A. – Petrobras, Minutes of the 66th Audit Committee Meeting, October 17, 2013, [PBRCG_01284372 at p. 12], "First year of self-assessment and testing of PwC Hedge Accounting - process already mapped and controls awaiting managers' self-assessment. First year of self-assessment and testing of PwC. PwC requested in 09/10, to be included the following systems in the 2013 SOX scope:..."; Petroleo Brasileiro S.A. – Petrobras, Minutes of the 69th Audit Committee Meeting, December 5, 2013, [PBRCG_01155009 at p. 14], "2) PricewaterhouseCoopers – PwC – Status of 2013 SOX Certification, presented by PwC Partner Ronaldo Valiño."

²⁵⁷ For example: PwC, Audit Committee 2013 Audit Plan, December 2013, June 4, 2013 [PBRCG 00086945].

²⁵⁸ Petróleo Brasileiro S.A. – Petrobras 2010 Form 20-F, p. F-4, KPMG Report, "Also, in our opinion, Petróleo Brasileiro S.A. – Petrobras and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on criteria established in COSO."; *See also:* Petróleo Brasileiro S.A. – Petrobras 2011 Form 20-F, p. F-5,

through year-end 2013 could reasonably provide Petrobras Leadership comfort that management's own conclusions about the effectiveness of its ICFR were reasonable.

94. In addition, at times, PwC utilized its forensic services group to provide additional specialized support to its audit team.²⁵⁹ For example, PwC became aware of the fact that Mr. Costa was arrested in March 2014 and that Petrobras had initiated several CIAs with potentially significant scope.²⁶⁰ The 2013 Petrobras 20-F had not yet been filed, so PwC consulted with one of its forensic specialists to evaluate the allegations and the company's response before providing assurance on the 2013 financial statements.^{261,262}

3. Other External Parties

95. Outside parties such as suppliers were notified of the whistleblower channels at Petrobras. For example, Petrobras provided its Code of Ethics to suppliers, ²⁶³ which contained

KPMG Report; Petróleo Brasileiro S.A. – Petrobras 2012 Form 20-F, p. F-3, PwC Report; Petróleo Brasileiro S.A. – Petrobras 2013 Form 20-F, p. F-3, PwC Report.

²⁵⁹ Alexander Figueiredo Deposition, April 18, 2016, 246:14-24, "Q. When did PwC Brazil engage the forensic specialist? A. We do not have engagement letters specifically for that type of work. We use it per demand. So if we are demanded, if we need, we use a specialist, and not only the forensics. So in this case, they were -- if Marcos Penassol [sic] or myself, in that case, if Marcos Penassol [sic] needs some support of our forensics team, he will ask for that type of support."

²⁶⁰ Marcos Panassol Deposition, April 19, 2016, 154:16-155-20, "Q. Other than from press reports, did you learn that from somebody at Petrobras prior to April 12, 2014? And by that, I mean whether or not Mr. Costa had been engaged in receiving bribes or in connection with money laundering at Petrobras. A. No. This was -- it was all external media reports. Q. And what did you -- what, if anything, did you do with respect to learning-- upon learning of the accusations and the arrest of Mr. Costa? A. We discussed that with the company. I discussed it with the CFO. I discussed that with the chief auditor. And at that time we were beginning the discussions. So we discussed with the company, so what would the company's response to that be? And later on, the company initiated two internal investigations, focusing on the -- that's the Item 4 here -- on the two Brazilian refineries that are mentioned in Item 4. Q. I'm sorry. What was the last part? A. At the end of -- subsequent to that conversation and subsequent to April 12, the company initiated two internal investigations, one on RNEST and one on COMPERJ, as a response to their concern of the arrest of Mr. Paulo Roberto Costa."

²⁶¹ Alexander Figueiredo Deposition, April 18, 2016, 213:3-17, "Q. Did PwC think it was important to wait until the CIA investigations concluded prior to the issuance of the 20-F financial statements?...A. The conclusion of the audit team was to identify the actions that the company took by the time it performed a review using our forensic specialists and we recommended to have a full disclosure on the exploratory notes of that 20-F. The 20-F referring to the 31st December 2013 explaining the status of those allegations, measures taken by the company and the findings, if any, providing adequate disclosure over those allegations."

²⁶² Marcos Panassol Deposition, April 19, 2016, 321:8-17, "Q. Did the PwC Brazil team do any work after completion of the fiscal year 2013 audit in connection with the company's filing of its 2013 20-F? A. Yes. We performed subsequent events. Q. In connection with that work, did you use the services of a PwC forensic specialist? A. Yes."

²⁶³ ELC 2012 – 2014, [PBRCG_01788629], "ELI 01 Petrobras has a Code of Ethics and Competitive Conduct Code, among other standards and guidelines, formally approved, which clearly define the ethical principles and commitments of conduct that guide the actions of the Petrobras System, to which are submitted all their employees, suppliers and service providers, with reference, including the refusal of unfair competition practices. In addition, the Finance Department requires the Management line, the completion of Adhesion to the Information and Material Act or Fact disclosure policy and Petrobras Securities Trading Policy. There is also the Code of Conduct of the High Federal Administration which includes the directors of joint stock companies."; "ELI 40 1 The Registry requires suppliers to accept the Disclaimer - SA8000. Compliance with the Code of Ethics is explicit in convening and contracts signed instruments. The Code is available on the Petrobras website. Inspections of this type are performed by GAPRE / SE."

information on the reporting of complaints through the Petrobras whistleblower channel.²⁶⁴

C. Petrobras's Compliance with SOX

96. Petrobras implemented its ICFR certification program pursuant to Section 404 of the Sarbanes-Oxley Act in 2006.²⁶⁵ In preparation of the SOX implementation, Petrobras consulted with Deloitte on the mapping, testing, and documentation of ICFR from 2004 through 2006.^{266,267} As part of its procedures to meet SOX certification standards and continuous improvement efforts, Petrobras created an Ombudsman's Office and Audit Committee and revised its Code of Ethics.²⁶⁸ After the implementation of SOX, Petrobras made ongoing assessments of its ICFR in light of changes in the business and its environment. For example, it developed an anti-corruption program and in 2011, established a working group to develop what would later become the PCPP.^{269,270}

97. Petrobras evaluated internal controls on three levels:

²⁶⁴ ETHICS CODE, Petrobras System, p.15, "1.9 keep ombudsman agencies as formal channels, among others, for receiving, routing and processing of opinions, suggestions, complaints, criticisms, and denunciations about ethics transgressions, from the various relationship groups of System, respecting the laws of the countries where it operates."; p. 25, "4.2 require to the service providers that their employees comply with the ethics principles and commitments defined in this Code, while contracts with System companies are in force."

²⁶⁵ Petróleo Brasileiro S.A. – Petrobras 2006 Form 20-F, p. 186, "Prisma's activities in 2006 were carried out with the guidance of the Internal Control Management Committee and monitored by the Audit Committee. These activities included the mapping, documentation, and maintenance of the internal control structure in order to mitigate any risks associated with our system of consolidated financial reports. Our General Internal Control Management Office continued to implement the best corporate governance and control practices with respect to all aspects of our business, services, financial and information technology sectors, according to the Public Company Accounting Oversight Board (PCAOB), the Committee of Sponsoring Organizations of the Treadway Commission (COSO), as well as the Control Objectives for Information and Related Technology (COBIT)."

²⁶⁶ Contract between Petroleo Brasileiro S.A. – Petrobras and Deloitie [sic] Touch Tohmatsu Auditores Independentes, for Specialized Technical Services, September 24, 2004, Annex I, "2. Service Steps...Step 1: Diagnosis of controls and procedures adopted in compliance with Entities and Processes, listed in item 3 (Scope)....Step 2: Documentation and assessment of internal controls and control processes in compliance with Entities and Processes, listed in item 3 (Scope)...Step 3: Operating efficiency test of controls."

²⁶⁷ Amendment Nr. 003 to Contract N r. 6000.0006146.04.2, between Petroleo Brasileiro S.A. – Petrobras and Deloitte Touche Tohmatsu Auditores Independentes, March 31, 2006.

²⁶⁸ Gerson Luiz Gonçalves Deposition, February 19, 2016, 162:13-21, "A. Petrobras has always tried to be align [sic] with the best controlling practices, so as soon as the Sarbanes-Oxley law came about, we tried to adapt ourselves. We created an ombudsman, we created the auditing committee, and we created the internal controls division, and with the evolution because it is a dynamic process, we created the code of ethics in line with the other companies, other large worldwide corporations."

²⁶⁹ Gerson Luiz Gonçalves Deposition, February 19, 2016, 162:22-163:4, "We found out that these large corporations created anti-corruption programs and with having contact with the global compact and other international entities and after there were all these problems that came up about the company and all these reports, reportings and things like that."

²⁷⁰ Communication of the Decision of the Board of Directors, Petrobras Anti-Corruption Program and Implementation,, July 4, 2013, pp. 3-4, [PBRCG_01566308], "2. The General Ombudsman, due to determination of the Executive Board (Minutes DE. Minutes, item 2, of May 5, 2011) coordinates the activities related to organizations and initiatives related to integrity and transparency in Petrobras and combating fraud and the corruption. 3. The General Ombudsman's office, in view of that, created a Working Group WG through the DIP GENERAL OMBUDSMAN GENERAL 52/2011 of Aug 17, 2011, to develop a corporate program that meets the specific requirements related to maintenance of a sound business environment, with the risk mitigation mechanisms, detection and correction of inappropriate conduct."

CONFIDENTIAL

1) Entity-level controls

Entity Level Control are corporative controls that vary in natures and precision: indirect, wide and comprehensive, when they refer to the environment control of the organization (culture, philosophy, risk appetite, supervision, ethical values); or direct and more specific, when they monitor, with higher precision, the efficiency of operational processes controls and restrain or detect, in timely manner, a significant error in these processes.

2) Information technology ("IT") controls

Information Technology General Environment Controls, which are necessary to control the automated processes designed to prevent or detect possible errors or frauds that may impact the achievement of the objectives of line of business, support and management objectives.

3) Process level controls

[Process] Internal Controls for the mitigation of relevant corporate risks that may impact the achievement of the goals set in the macro-processes and respective business, support and management processes, from the perspectives of efficiency, effectiveness, and cost-effectiveness.²⁷¹

1. SOX Certification Overview

- 98. I focus my discussion of the SOX certification process on 2012 to provide an illustrative example of how the process worked. Based on my comparison of the overall approach for 2012 to other years in the Relevant Period, I find that the SOX certification processes were similar in nature each year.²⁷² Based on my professional experience and review of the materials listed in Appendix C, in my opinion, the SOX certification process was adequate to conclude on the effectiveness of ICFR.
- 99. In 2012, the SOX Certification Group developed the SOX certification plan and, in collaboration with Internal Audit and PwC, scoped Petrobras's ICFR testing based on risk

²⁷¹ Petrobras, "Internal Controls in the Petrobras System," Code: PG-0V1-00020-0 [PBRCG_00262748], p. 21, "6.4 Internal Controls Management Components..."

²⁷² For example, I have reviewed the minutes for Audit Committee meetings from February 11, 2010 (meeting # 34) through July 6, 2015 (meeting # 91), Internal Audit plans from 2010 through 2015 [PBRCG-P_01920738, PBRCG-P_02103081, PBRCG-P_02283348, PBRCG_01379925, PBRCG_01387547, PBRCG_00766727-PBRCG_00766767], Internal Audit reports from 2010 through 2014 [PBRCG_01076070-PBRCG_01076217, PBRCG_01076218-PBRCG_01076352; PBRCG_01070506-PBRCG_01070662; PBRCG_01073080-PBRCG_01073263; PBRCG_00806899-PBRCG_00807058], SOX certification presentations from 2010 through 2014 [PBRCG_01148745-PBRCG_01148807, PBRCG_01377630, PBRCG_01377591, PBRCG_01384810, PBRCG_01389494, PBRCG_01389819, PBRCG_01392593].

assessment and materiality considerations.^{273,274} Specifically, the SOX certification plan detailed the nature, timing, and extent of ICFR testing, including:

- 1) Self-evaluation of macro process flowchart design
- 2) Review of risks and best control practices
- 3) Self-evaluation of controls and entity-level control questionnaires
- 4) Official tests by internal audit
- 5) Submission of all papers to external auditors
- 6) Official tests from external auditors
- 7) Confirmation that there has been no change to controls
- 8) Classification of the impact of uncorrected deficiencies
- 9) Completion of the SOX/CVM sign-off.²⁷⁵
- 100. The SOX Certification Group interviewed Petrobras management to identify the relevant processes and sub-processes within the organization.²⁷⁶ Risk levels were assessed as high, medium, low, or as non-key (and therefore outside the scope of evaluation).²⁷⁷
- 101. The SOX Certification Group also identified an "owner" manager of each sub-process

²⁷³ Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, p.3, [PBRCG-P_02283348], "The scope of processes deserving examination is defined from the risk mapping and relevance necessary for the evaluation of the internal control environment, and that has the participation of this INTERNAL AUDIT, from the Corporate Finance Area and the External Auditing Company responsible for certification of the Company's control.

In this sense, processes considered relevant in relation to the Company's Financial Statements were selected for examination, and those related to the most significant accounting items were contemplated, i.e., with values greater than 5% of the Company's profit before taxes noting also their respective level of exposure to risks that could jeopardize the strategic objectives of Petrobras.

In addition to the materiality it was taken into account the qualitative factors of risk and linking to the Strategic Plan."

²⁷⁴ Petrobras Prisma Training Course, Process Design Assessment, [PBRCG_01787879 at p. 6], "The processes selected to compose the Certification scope are defined from a materiality calculation specialized system of financial statements and specific risks analysis. Each selected process needs to be modeled in ARIS tool, according to design standards disclosed by TIC, for the understanding of the essential activities which impact on internal controls."

²⁷⁵ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, [PBRCG_00727994 at p. 33].

²⁷⁶ Petrobras Prisma Training Course, Process Design Assessment, [PBRCG_01787879 at p. 7], "After interviews and meetings with process managers and internal control area experts, relevant process designs will be created or updated in ARIS system. The design or the link for the process design which was created in ARIS will be attached to the Process Control. A process is comprised by several sub-processes and each sub-process usually has a responsible owner (process owner), so, the assessment must be done by sub-process, thus avoiding conflicts of authority."

²⁷⁷ Petrobras, "Internal Controls in Processes Management," Code: PG-0V4-00091-A, [PBRCG_00262087 at p. 12], "Importance It reflects risk classification according to materiality and scope calculation methodology for SOX and CVM Certification, developed by Petrobras Corporate Internal Controls and supported by its Assessment System for Risks in processes - SARP, as follows: Key – High Risk; Key – Medium Risk; Key – Low Risk; Complementary; No-Key; Entity-Level."

responsible for the identification of specific risks and evaluation of the process design.²⁷⁸ For example, a process owner would be responsible for the "Contracting Services" and "Purchasing Materials" sub-processes in the Procurement of Goods and Services process.²⁷⁹ In total, the SOX Certification Group identified 11 processes in 2012, each with one or more sub-processes.²⁸⁰ Process owners used a Petrobras-developed questionnaire to help in the process design assessment:

- 1) Strategic Governance: Do you identify significant changes in policies, guidelines, rules or procedures which should be but are not reflected in the attached sub-process activities?
- 2) **Strategic Governance**: Do you identify significant changes in the Company's principles or internal practices (accounting, tax or others) which should be, but are not reflected in the attached sub-process activities?
- 3) **Strategic Governance**: Do you identify fraud possibilities or significant mistakes in the attached sub-process operations that cannot be prevented or detected by its activities or by other sub-processes activities?
- 4) Strategic Business and Political and Economic Model: Do you identify new (external or internal) risks in the attached sub-process that may affect the financial reports and may not be prevented or detected by its activities?
- 5) **Compliance**: Do you identify significant changes in laws and / or regulations which affect the attached sub-process and that are not considered in its activities?
- 6) **Operational Processes**: Do you identify significant changes in operational activities (for example: duties segregation levels, competence limits or supervision / monitoring levels) which are not reflected in the attached sub-process?
- 7) **Operational Personal**: Do you identify significant changes in the roles and

²⁷⁸ Petrobras Prisma Training Course, Process Design Assessment, [PBRCG_01787879 at p. 8], "The Process Control system management team will create an assessment task for the 'owner' manager of each sub-process, who must analyze and assess them individually, without missing the whole process and inter-relations general view among the sub-processes. For this reason, the complete process flow is sent in the task, as the formal responsibility lies only upon the sub-process(es) task."

²⁷⁹ 2012 Internal Audit Annual Internal Audit Activities Report, Attachment I, [PBRCG 01070506 at p. 23].

²⁸⁰ Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities [PBRCG_01070506 at pp. 13-14], Below we summarize the main items included on account of the certification of internal controls: [1] Marketing, [2] Accounting, [3] Litigation, [4] Financial, [5] Entity level controls, [6] Procurement of Goods and Services, [7]Control of Domestic Reserves, [8]Operational Partnerships, [9] Human Resources, [10] Information Technology, [11] Taxes."

- responsibilities of those involved in the attached sub-process that may cause relevant risks in financial reports not mitigated by its activities?
- 8) **Operational Personal**: Do you identify key personnel reduction or substitution in attached sub-processes [for] complex non-automated activities, without substitute's qualification or supervision, offering activities unmitigated risk?
- 9) **Operational Information and Technology**: Do you identify hardware, software, interface, business rules automation changes in the attached sub-process, with significant activities unmitigated risk?²⁸¹
- 102. Process owners were responsible for the accuracy of the process designs, assessed whether they were compliant, partially compliant, or non-compliant, and provided their assessments to the SOX Certification Group for review.²⁸² Process owners also identified relevant controls that mitigated the identified risks and assigned the evaluation of the control design to control owners.²⁸³ Control owners used another Petrobras-developed questionnaire to help in the control design assessment:
 - 1) What is being done to respond to control best practices?
 - 2) Who executes the control?
 - 3) Where does the control physically or logically occur?
 - 4) How often is the control executed?
 - 5) Why is the control executed?
 - 6) How is the control executed?
 - 7) Is there a way to improve and reflect/control the cost/benefit ratio?²⁸⁴

²⁸¹ Petrobras Prisma Training Course, Process Design Assessment, [PBRCG_01787879 at pp. 8-10], "To help in the assessment, a standardized questionnaire was defined, compiled from research with external auditors and specialized consulting concerning the main items that may impact a process design, from the internal control point of view. All questions must be answered, according to the following questionnaire..."

²⁸² Petrobras Prisma Training Course, Process Design Assessment, [PBRCG_01787879 at p. 24], "The assessment task is related with the Certification process phase which is highlighted in the flow. The process design is performed in ARIS system and, afterwards, attached to Process Control. Before classifying the process as 'compliant', 'partially compliant' or 'non-compliant' and fill in the current situation, the manager will have to all the questions of the questionnaire. Then, the task will automatically be sent to the internal control area that will review the assessment and may accept or reject it. If it is accepted, the flow goes ahead. If it is rejected, the task returns to the manager."

²⁸³ Petrobras Prisma Training Course, Control Design Assessment, [PBRCG_01787941 at p.7], "It is the phase of the SOX annual Certification process in which the Managers of Petrobras System companies, identified as responsible for internal controls, assess their controls by entering information about them into the Process Control system." p. 8.

²⁸⁴ Petrobras, "Internal Controls in Processes Management," Code: PG-0V4-00091-A, pp. 13-14, [PBRCG_00262087-104], "To diagnose the control actual present situation against the best practice, its Purpose, Automation and Period, the responsible

103. Control owners determined whether controls were properly designed to mitigate the identified risks, assessed whether they were compliant, partially compliant, or non-compliant, and provided their assessments to the SOX Certification Group for review.^{285,286} For process and/or control designs that were not compliant, a remediation team worked to correct the issues^{287,288} and provided the updated designs to the process and/or control owners and SOX Certification Group for review. This process continued until the process and/or control design was remediated.²⁸⁹

The workflow will remain between the assessment and remediation tasks until the control no longer has problems and it is classified as 'COMPLIANT WITH SOX.'290

104. In addition, Petrobras managers completed entity-level control questionnaires that addressed internal controls not specifically related to financial statement accounts such as ethics, corporate governance, and risk management.^{291,292} The SOX Certification Group received the

manager may use the traditional technique of the 5 W and the 2 H: WHAT, WHAT IS BEING DONE TO RESPOND TO CONTROL BEST PRACTICE? WHO, IF THE MANAGEMENT IS ATTRIBUTED CORRECTLY, WHICH FUNCTIONS IN THIS MANAGEMENT EXECUTE THE CONTROL? WHERE, WHERE DOES THE CONTROL PHYSICALLY OR LOGICALLY OCCURS? WHEN, HOW MANY OFTEN IS THE CONTROL EXECUTED? WHY, WHY IS THE CONTROL EXECUTED? HOW, HOW IS THE CONTROL EXECUTED? HOW MUCH, IS THERE A WAY TO IMPROVE AND REFLECT CONTROL COST X BENEFIT RATIO?"

²⁸⁵ Petrobras, "Internal Controls in Processes Management," Code: PG-0V4-00091-A, p. 13, [PBRCG_00262087-104, "Possible classifications (results) of annual Control Activities self-assessment by managers may be, according to details on corporate tool of internal controls documents (check PG - Standard Internal Controls Document System), as follows: Complies: control is implemented in order to respond to the related control objective. Partially Complies: control is partially implemented, not responding fully to the related control objective, not fully mitigating a potential error. Do Not Comply: The control described in best practice does not exist, or is not implemented or else, is not mitigating the risk, thus, impacting on the control objective."

²⁸⁶ Petrobras Prisma Training Course, Control Design Assessment, [PBRCG_01787941 at p.8], See "Control Self-Assessment" & "Control Review."

²⁸⁷ Petrobras Prisma Training Course, Process Design Assessment, [PBRCG_01787879 at p. 12], "As we will see in details in the Process Control tutorial, all the **partially compliant** or **non-compliant** conclusion generates the need for document **Issues (I)**, which shall be documented in the system. For each identified I, one or more remediation plans (RP) may be created."

²⁸⁸ Petrobras Prisma Training Course, Control Design Assessment, [PBRCG_01787941 at p. 16], "START CONTROL DESIGN'S PC REMEDIATION: During the performance of the assessment task, the control must be classified as 'compliant with SOX requirements' or 'non-compliant with SOX requirements.' For controls where non-compliant (Critical Point – PC) is identified, causing such control to be classified as a control that 'NON-COMPLIANT WITH SOX' or 'PARTIALLY COMPLIANT WITH SOX,' the RPC [Responsible for Critical Point] must start or not start the REMEDIATION to eliminate such critical points."

²⁸⁹ Petrobras Prisma Training Course, Process Design Assessment, [PBRCG_01787879 at p. 25], "The remediation task is related with the Certification process area highlighted in the flow. For each non-compliant or partially compliant, the system will force the user to create one or more issue (1). For each issue created, the user will have the option to create one or more remediation plans (RP). Once the issue is remediated, the user must: 1. Finish the remediation plan(s) (which might have been created); 2. Finish the issues; 3. Describe the new current situation; 4. Re-assess the design process (which will be automatically submitted to a new review)."

²⁹⁰ Petrobras Prisma Training Course, Control Design Assessment, [PBRCG_01787941 at p. 16].

²⁹¹ Petrobras, "Entity Level Internal Controls," Code: PG-0V2-00004-0, p. 8, [PBRCG_00262675–89], "At Petrobras, the CINE [Entity Level Indirect Controls] are self-assessed by the managers of the different companies and units through an annual

entity-level control questionnaires, summarized the results, and helped to remediate identified gaps.²⁹³

- 105. Upon completion of the self-assessment process, Internal Audit tested the operating effectiveness of controls considered to be medium and high risk.²⁹⁴ In circumstances where a process operated in multiple Petrobras locations, Internal Audit selected locations for testing based on materiality, nature and complexity of operations, location-specific risks, the results of past audits, and communications from senior management.²⁹⁵
- 106. As shown in **Table 5**, in 2012, Internal Audit performed 193 ICFR audits and tested 1,423 internal controls over financial reporting.

questionnaire, elaborated by Petrobras internal controls unit, with the purpose of standardizing the minimum corporate governance requirements of the Company."

²⁹² Petrobras, "Entity Level Internal Controls," Code: PG-0V2-00004-0, p. 8, [PBRCG_00262675–89], "The entity level indirect controls (CINE) are corporate controls that have no direct or clearly associated connection with detection or errors or irregularities (frauds) in certain processes and that may result in material impact in the financial statements of the Company."

²⁹³ Petrobras, "Entity Level Internal Controls," Code: PG-0V2-00004-0, pp. 6–7, [PBRCG_00262675–89], "It is the competence of the managers of the companies and units of the scope to:...Send, on a timely basis, the answers to the questionnaire to the area in charge of Petrobras internal controls;...It is the competence of the corporate internal controls [SOX Certification Group] to, in addition to the responsibilities described in item 5.2 of the standard Manage Internal Controls attached, in relation to this standard: • Elaborate and updated the CINE questionnaire on an annual basis; • Keep a single database with all questionnaire answers; • Choose the question to be sent to the managers of the companies and units of the scope, according to the application to the companies and units and/or responsibilities and authorities of the said managers; · Apply, on an annual basis, the questionnaire in all companies and units of the scope, with the support, to the extent possible, of the Local Internal Control or the employee designated in an Internal Control Function; • Validate the answered questionnaires; and • Provide support to the managers and specialized commissions to solve the gaps noted in CINE."

²⁹⁴ Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, p. 13, [PBRCG-P_02283348], "After risk identification and classification, the following actions were performed: a) self-assessment by the managers of the controls; and b) application of tests by Internal Auditing, on self-assessment controls considered to be medium and high risk by Management."

²⁹⁵ Petróleo Brasileiro S.A. – Petrobras 2012 Annual Plan of Internal Audit Activities, p. 4, [PBRCG-P_02283348], "Definition of the Units (Multi Locations) For processes carried out in the Company's various locations the selection was based on a risk / relevance Matrix in which the following aspects were evaluated jointly: a. materiality of the operations involved; b. strategic importance (related to the Company's strategic objectives); c. specific risks & control environment (complexity and diversity of operations, level of automation / standardization of controls, availability and quality of resources, turnover of managers or performing staff, etc.); d. history of the latest works - period of performance of the last audits and their results; e. indications (information, requests or directions) of senior management and Executive Managements of the Company. Note: The relevance of each unit was analyzed separately, by the business area. Regarding the item materiality, the contracted amounts or realized (paid or billed) were considered, included in management reports and / or in accounting records."

Table 5
Summary of 2012 Audits and ICFR Activities by Macro-Process

Macro-Process	Audits	ICFR Activities
Procurement of Goods and Services	18	112
Accounting	37	338
Finances	45	227
Information Technology	29	161
Taxes	23	150
Marketing of Products	20	152
Operational Partnerships	4	71
Litigation	8	56
Corporate Governance	2	85
Human Resources	3	25
Other	4	46
Total	193	1,423

Source: Summarized based on information from the Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Ir Audit Activities, [PBRCG_01070506 at pp. 8, 14]. Note the "Other" line for Control Activities groups Reserves field denoted "PETRONECT".

107. PwC also performed independent testing of ICFR based on a top-down, risk-based approach.²⁹⁶ It gained an understanding of Petrobras's operations, evaluated the relevant risks, and scoped its testing based on size and complexity.²⁹⁷ Part of PwC's ICFR approach included utilizing the work of Internal Audit.²⁹⁸ Specifically, PwC reviewed and/or re-performed Internal Audit's testing for controls deemed by PwC to be low or medium risk and performed

²⁹⁶ Executive Summary of the PwC 2012 Work Plan, p. 4, [PwCBR_PETRO_000071493] "Our auditing strategy is based on the use of a top-down approach, based on risk, based on the integration of internal control audits over the preparation of financial reports along with auditing of accounting statements and on applying well-grounded professional judgement. These principles allow our auditing strategy to be developed and executed in an effective and efficient manner...Our auditing approach is in line with our risk assessment as well as with our criteria for materiality as they relate to the System (consolidated financial statements)..."

²⁹⁷ Executive Summary of the PwC 2012 Work Plan, p. 14, [PwCBR_PETRO_000071493] "Risk Assessment • Understanding the business and its risks while considering the Company's evaluation. • Evaluate the Audit's relevance and risks, including significant risks. Understanding Internal Controls • Sizing the audit in regards to scope and complexity. • Understanding corporate controls and IT controls. • Consider the Company's evaluation process and work conducted by others. Nature, Timing and Extent of Testing • Identify significant accounts and processes and statements made by relevant audits. • Consider limitation of multiple locations. • Evaluate the confidence of work performed by others. • Evaluate end of term financial reports. • Evaluate the risk of fraud."

²⁹⁸ Executive Summary of the PwC 2012 Work Plan, p. 17, [PwCBR_PETRO_000071493] "Confidence in the work Conducted by Internal Auditing. AS 5 allows the use of work performed by other professionals in order to diminish the nature, opportunity and scope of tasks that relate to internal controls. As part of our planning for integrated auditing, we check with the Company itself on the best way to make use of the work they have already realized with their internal auditors and how it can make our work better and more efficient. We use our professional judgement to determine which situations warrant the use of work conducted by internal auditors, based on risk and the competence and objectivity of these aforementioned professionals."

independent testing for controls deemed to be high risk.²⁹⁹ In addition, PwC considered risks related to fraud in planning its ICFR audit.³⁰⁰

108. The SOX Certification Group aggregated the results of the self-assessments and Internal Audit's testing and presented a summary to the Audit Committee as part of its SOX certification presentation.³⁰¹ The nature and severity of control deficiencies were discussed with the Audit Committee.³⁰² PwC also prepared an ICFR report that summarized the nature and severity of internal control deficiencies from its ICFR assessment, which it provided to the Audit Committee.³⁰³

109. In summary, all processes, risks, and internal controls were assessed through the self-assessment process and reviewed by the SOX Certification Group. In addition, Internal Audit tested controls deemed to be medium or high risk while PwC performed an independent evaluation and tested controls that PwC determined to be high risk controls and reviewed and/or re-performed Internal Audit's testing of controls PwC deemed to be low or medium risk. Therefore, all controls were self-assessed, with such assessments being reviewed by the SOX Certification Group, and higher risk controls were tested by two different parties.³⁰⁴

²⁹⁹ PwC, Audit Committee 2013 Audit Plan, December 2013, p. 17, [PwCBR_PETRO_000071493], "Risk: HIGH Approach: Independent tests (PwC); Risk: MEDIUM Approach: Confidence in the Internal Audit tests review of the roles and nature, time and extent of the tests repetition of 30% of these internal audit tests; Risk: LOW Approach: Confidence in the Internal Audit tests review of the roles and nature, time and extent of the tests."

³⁰⁰ Executive Summary of the PwC 2012 Work Plan, p. 12, [PwCBR_PETRO_000071493], "Significant Risk: (General) The management overloads controls. Auditing Standards automatically require that this risk be considered) Company Response: Robust control environment and working managerial policies, Auditing Response: Entity level assessment of controls; Execution of auditing procedures and evaluation of the risk of fraud for relevant subsidiaries - including the results of these procedures when formulating our auditing approach; Unforeseen circumstances and manual and unusual [data] entry tests both at Petrobras (controlling company) as well as at its subsidiaries; Consolidated level execution of procedures for assessing the reasonability of financial statements; Fraud risks were analyzed in detail in attachment II."; Attachment II, "Risks of Fraud...Overlap of controls by the management."

³⁰¹ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, p. 35, See table. [PBRCG 00727994]

³⁰² Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, pp. 35 - 39. [PBRCG 00727994]

³⁰³ PwC Report on Improvement of Internal Controls and Accounting Procedures, December 31, 2012, [PBRCG_00086945 at] p. 1 "We present our report with recommendations on internal controls in connection with the examination of individual and consolidated financial statements of Petróleo Brasileiro SA – Petrobras".

³⁰⁴ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, p. 26, [PBRCG_01260715], "Continuous Assurance aims as ensuring that: 1st Line of Defense – Managers – risks are being effectively managed and within accepted limits of exposure, with internal controls managed and operating adequately; 2nd Line of Defense – Internal Controls/Compliance – act in the advisory support and quality assurance of the implementation and improvement of automated continuous monitoring in the processes of the managers; 3rd Line of Defense – Internal Auditing – monitors, in the final instance and independently, the functioning of the continuous monitoring control system and risk events, including for the recovery of financial and operational losses, also extending to large temporal and event databases."

2. Entity-Level Control Testing

- 110. In 2012, individuals throughout 33 departments at Petrobras completed entity-level control questionnaires.³⁰⁵ Each questionnaire included 36 entity-level controls that addressed one or more internal control component of the COSO framework. The SOX Certification Group compiled the questionnaire responses and summarized how each control objective was achieved.
- 111. The SOX Certification Group also categorized the status of each control as compliant, partially compliant, or non-compliant. For any partially compliant or non-compliant control, the SOX Certification Group established a remediation plan and also identified compensating controls that mitigated the impact of the deficiency. All entity-level controls were identified as compliant through the 2012 questionnaire process.³⁰⁶ Once the SOX Certification Group completed this process, both Internal Audit and PwC independently tested the design and operating effectiveness of Petrobras's entity-level controls.³⁰⁷
- 112. The entity-level control questionnaires included specific controls that addressed the Control Environment component of the COSO framework.³⁰⁸ For example, Petrobras maintained controls to:
 - 1) Ensure that a Code of Ethics existed, that employee behavior standards were aligned with the integrity and ethical values of Petrobras, and that disciplinary measures were in place in instances of non-compliance.³⁰⁹
 - 2) Assess whether senior management made use of specific committees to provide

³⁰⁵ Petrobras Internal Audit workpaper, entity level controls, [PBRCG_01788629], 2012 - 2014, sheet "PERGUNTAS-ELI-2012-PB". For example, individuals from Finance, Accounting, Legal, Executive's Office, Engineering, etc.

³⁰⁶ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG 01788629], sheet "ELI-2012-PB".

³⁰⁷ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629]; *For example*: PwC entity-level control workpapers, [PwCBR_PETRO_00009951, PwCBR_PETRO_000009766].

³⁰⁸ Petrobras classified its entity-level controls as either indirect or direct. The annual questionnaire reflected indirect entity-level controls at Petrobras. Petrobras, "Entity Level Internal Controls," Code: PG-0V2-00004-0, p.4, [PBRCG_00262675–89], "Entity Level Control - corporate controls that vary in relation to their nature and precision: indirect (CINE), general and comprehensive, regarding to the organization control environment (culture, philosophy, risk appetite, supervision, ethic values); or direct (CDNE) and more specific, when they monitor, more precisely, the efficiency of the operating process controls and avoid or detect a significant error in these processes, on a timely basis."; p. 8, "At Petrobras, the CINE [Entity Level Indirect Controls] are self-assessed by the managers of the different companies and units through an annual questionnaire, elaborated by Petrobras internal controls unit, with the purpose of standardizing the minimum corporate governance requirements of the Company."

³⁰⁹ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI01 Are the Codes of Ethics and Conduct: a) formally approved? b) clearly guide the workforce and other stakeholders (customers, suppliers, government, shareholders, subsidiaries and affiliates etc.) on the principles, responsibilities and ethical and behavioral requirements required of the Company and its workforce?"; "ELI03 The rules and procedures on disciplinary measures (penalties) resulting from Non-compliance with requirements of the Codes of Ethics and Conduct Complementary of the Company are: a) clearly defined? b) widely disseminated? c) of easy access to the workforce?"

support in areas that required more attention and complexity.³¹⁰ For example, the Board of Directors used an Audit Committee to assist in financial, accounting, and auditing matters³¹¹ and a Remuneration and Succession Committee to oversee employee retention and incentive compensation plans as well as the appointment and dismissal of the Executive Board and the Executive Manager of Internal Audit.³¹²

- 3) Assess the communication of goals, strategies, targets, and compliance with key agreements from senior management to employees as well as senior management's receipt of sufficient and timely information from business areas to help monitor the identified goals, strategies, etc.³¹³
- 4) Ensure standard procedures were in place regarding the assignment and delegation of authority and responsibility and the dissemination and monitoring of authority limits as well as sensitive information.³¹⁴
- 5) Assess whether Petrobras maintained an appropriate organizational structure responsible for risk assessment, internal controls, and internal audit and whether the individuals involved had sufficient knowledge and experience to perform their

³¹⁰ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI10 Does the senior management (Board of Directors, Executive Board, Executive Management or Unit Management) make use of specific committees (own or from unit that performs a similar function) to specialist support in areas that require more attention and technical complexity for decision making and monitoring?"

³¹¹ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI45 Does the Audit Committee have at least one "financial expert" as defined by the rules of the Securities and Exchange Commission (SEC)?"

³¹² Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI06 Does the Compensation and Succession Committee (or the board that performs such function) oversee and approve: a) the appointment and dismissal of the Executive Board? b) the appointment and dismissal of Executive Manager of Internal Audit (in which case together with the Audit Committee) c) incentive plans and retention of professionals?"

³¹³ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI08 Does the senior management (Board of Directors, Executive Board, Executive Management or Unit Management) unfold and communicate to the lower management levels, sufficiently and timely the decision making on: a) strategies? b) objectives? c) Goals? d) indicators? e) compliance with terms of important agreements?"; "ELI09 Does the senior management (Board of Directors, Executive Board, Executive Management or Unit Management) receive sufficient and timely information from the business areas to monitor information on: a) strategies? b) objectives? c) goals? d) indicators? e) compliance with terms of important agreements?"

³¹⁴ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI12 Have the Organization defined and formalized liability limit matrix, competence and authority for all operations and transactions assessed as relevant by senior management that meets the following requirements: a) review by the legal department? b) timing of disclosure to the relevant management levels? c) deployment for subsidiaries and affiliates, where applicable? d) the timing of the implementation of the information and control systems? and e) appropriate intervals of review and update?"; "ELI30 Has the organization defined function and / or committee responsible for the implementation, dissemination and policy review, regulatory framework and all the sensitive aspects of information security to the Petrobras subsidiary and controlled with appropriate reporting line of authority?"

- duties.315
- 6) Monitor the structure, policies, and standards of the Human Resources function to align employee behavior with the strategic objectives and goals of Petrobras.³¹⁶
- 7) Ensure the workforce was sufficiently qualified and adequate in numbers to achieve the goals and targets established by senior management.³¹⁷
- 8) Monitor employee turnover and understand the reasons for employee termination, especially in cases where an individual left unexpectedly.³¹⁸
- 113. The entity-level control questionnaires included specific controls that addressed the Risk Assessment component of the COSO framework. For example, Petrobras maintained controls to:
 - 1) Assess whether senior management regularly evaluated risks related to financial, technological, and human resource matters. This included the identification, evaluation, remediation (if necessary), and monitoring of controls.³¹⁹
 - 2) Ensure the communication of risks between senior management and employees.³²⁰

³¹⁵ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI40 Does the (s) unit (s) or function (s) responsible (s) for risk assessment and / or internal controls and / or compliance and / or internal audit of the organization (own or of the Company) have adequate strategic positioning within the organization and broad access to senior management (such as: Board of Directors, Audit Committee and Directors)?"

³¹⁶ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI14 Are the guidelines, standards and human resources procedures: a) standardized and formalized? b) in line with the parent company (where applicable)? c) Revised and Updated? Do the guidelines, standards and human resource procedures include the following activities: a) admission / contracting? b) professional training programs and ongoing training? c) evaluation, incentives, promotion, compensation? d) personal mobility? e) motivated or unmotivated staff termination?"; "ELI15 Are the corporate skills of human resources: a) described and disseminated to the leaders and employees of the Organization? b) aligned with the subscidiaries and offiliates?"

³¹⁷ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI17 Does the workforce consist of experienced, qualified personal and in adequate numbers for the critical activities to achieve the goals and targets set by senior management?"

³¹⁸ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI16 Is the key staff turnover at an acceptable level for the sustainability of the business? Is it usual the unexpectedly exit of key people or with short notice? Is the abnormal turnover assessed so that corrective measures are taken, if any? Is there a continuity plan for key personnel exit? Is it understood as key personnel those who have duties and responsibilities that affect the continuity or integrity of material transactions."

³¹⁹ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI04 Does the senior management (Board of Directors, Executive Board, Executive Management or Unit Management) have sufficient resources to achieve the objectives of the strategic plan and business plan, and does it identify and regularly evaluate risks of financial, technological and human resources that can impact them?"

³²⁰ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI08 Does the senior management (Board of Directors, Executive Board, Executive Management or Unit Management) unfold and communicate to the lower management levels, sufficiently and timely the decision making on: a) strategies? b) objectives? c) Goals? d) indicators? e) compliance with terms of important agreements?"; "ELI09 Does the senior management (Board of Directors, Executive Board, Executive Management or Unit Management) receive sufficient and timely information from the business areas to monitor information on: a) strategies? b) objectives? c) goals? d) indicators? e) compliance with terms of important agreements?"

- 3) Establish a policy on information security, advise on the appropriate use of information in compliance with legal requirements, and prevent the disclosure of confidential information.³²¹
- 4) Understand the selection, evaluation, and retention of suppliers as well as the determination of supplier risk assessments. Part of this control considered supplier compliance with the Petrobras Code of Ethics.³²²
- 5) Ensure that the risk assessment plan, internal controls, compliance, and internal and independent audits were aligned with the risks of Petrobras and that the functions involved had sufficient resources to perform their duties.³²³
- 6) Assess whether there was a clearly defined risk philosophy that was disclosed to individuals within the organization.³²⁴
- 7) Evaluate whether the risk management process and financial reporting risks disclosed on Form 20-F were supported by the areas, methodologies, and systems of Petrobras.³²⁵
- 8) Assess whether senior management received regular information on the results of risks assessments and risk mitigation decisions.³²⁶

³²¹ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI29 Does the organization have Information Security Policy to advise on the appropriate use of information in compliance with legal requirements and also to prevent the disclosure of confidential information in authorized that may focus groups of many interests (eg. employees, shareholders, competitors, customers, suppliers, government and others) or provide fraud by misuse of physical and electronic means?"

³²² Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI36 Do the selection and retention of suppliers for bidding and hiring follow rules to prevent risk of fraud or organization's image? Are there minimum guarantee mechanisms that suppliers comply with the universal ethical "Principles" of code of ethics of Company and, in justifiable cases, may suffer reviews and inspections to ascertain any changes in relevant aspects such as child labor, slave labor, environmental risks or fraud and corruption)?"

³²³ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI41Is the work plan (s) unit (s) or function (s) responsible (s) for risk assessment, internal control, compliance and internal audit aligned with the structure and the preliminary assessment of strategic, operational, reports financial and compliance risks of strategic plans and the organization's business? Is it approved by senior management? Do these units or functions have sufficient resources for its fulfillment?"

³²⁴ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI19 Is the organization's risk philosophy clearly disclosed to appropriate management levels? Are there Policies and Risk Management Guidelines (financial, operational and strategic) clearly defined and disclosed to subsidiaries and affiliates, where applicable?"

³²⁵ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI20 Are the relevant risks related to financial reporting and risk factors ("risk factors") disclosed to the market on Form 20F and / or Petrobras Reference Form and its subsidiaries and affiliates managed by the organization? Is the relevant risk management process disclosed to the market supported by the areas, methodologies and specialized systems of the Company or its own subsidiaries for monitoring their exposure?"

³²⁶ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI22 Does the senior management receive regular information on the process and result of the management of relevant risks, including those disclosed in Form20F and provide resources necessary to mitigate these risks?"

- 114. The entity-level control questionnaires included specific controls that addressed the Monitoring component of the COSO framework. For example, Petrobras maintained controls to:
 - 1) Ensure that senior management monitors internal controls, including the evaluation of the internal control certification process and work performed by the independent auditor.³²⁷
 - 2) Ensure that the risk assessment plan, internal controls, compliance, and internal and independent audits were approved and monitored by senior management.³²⁸
 - 3) Ensure that recommendations on controls from self-assessments, internal audit, the independent auditor, and external oversight bodies were reported and addressed by responsible managers with the appropriate authority.³²⁹
 - 4) Ensure the Audit Committee met at appropriate intervals to perform its duties.³³⁰
- 115. The entity-level control questionnaires included specific controls that addressed the Information and Communication component of the COSO framework.³³¹ For example, Petrobras maintained controls to:
 - 1) Evaluate the transparency and reliability of Petrobras's financial reporting and disclosures, its ethical culture, and active participation of management in the review

³²⁷ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI05 Does the senior management (Board of Directors, Executive Board, Executive Management or Management Unit): a) perform environmental monitoring of internal controls under its administration? b) provide adequate support to the integrity and reliability of financial reporting? c) ensure adequate controls to prevent fraud / anti-corruption and safeguarding assets under its responsibility?"

³²⁸ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI41 Is the work plan (s) unit (s) or function (s) responsible (s) for risk assessment, internal control, compliance and internal audit aligned with the structure and the preliminary assessment of strategic, operational, reports financial and compliance risks of strategic plans and the organization's business? Is it approved by senior management? Do these units or functions have sufficient resources for its fulfillment?"

³²⁹ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI43 Are the recommendations on controls from internal audit work, external, external oversight bodies or self-assessments of controls and compliance of the organization itself are promptly reported and addressed by managers responsible with appropriate authority? Are measurements monitored, consolidated and communicated to senior management by corporate areas responsible for reporting these issues?"

³³⁰ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI44 Does the Audit Committee meet at appropriate intervals to discharge the responsibilities set out in its rules and does it make use of specialists when needed? Do the Committee members annually self assess whether those duties are being fulfilled? (Ask the members to answer the attached questionnaire, based on the Rules of Procedure)?"

³³¹ Dr. Henning mentions the five components of the COSO Framework on pp. 4–5 of this report, "Internal Control – Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994. However, in the Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, he only makes allegations specific to the Petrobras's Control Environment (pp. 1–4), Control Activities (pp. 1–15), and Risk Assessment and Monitoring (pp. 1–32). While not mentioned by Dr. Henning in his report, I include discussion of the Information and Communication component at Petrobras.

CONFIDENTIAL

- of financial reports.332
- 2) Evaluate the disclosure controls and procedures of financial reporting were adequate to ensure the integrity, security, and timeliness of such information.³³³
- 116. For each entity-level control, both Internal Audit and PwC independently documented the control description, performed test procedures, evaluated the results, and concluded on the operating effectiveness of the control. Internal Audit and PwC testing procedures varied by control but generally included verifying that Petrobras internal control policies were properly established, documented, followed, monitored, and/or communicated to the appropriate parties.³³⁴ Both Internal Audit and PwC independently determined that entity-level controls were operating effectively in 2012.^{335,336}

3. Process Level Control Testing

117. Petrobras performed specific testing over process level controls in the procurement process. In 2012, the process relevant to the procurement of goods and contracting of services was the "Procurement of Goods and Services" internal control process.³³⁷ The relevant subprocesses within Procurement of Goods and Services were Contracting Services, Purchasing Materials, Supplier Register, and Receiving.³³⁸ Process owners in each sub-process assessed the

³³² Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI07 Does the philosophy of the organization tend to be accurate and fair in the preparation and dissemination of financial statements, even though in complex and harsh environments? Is this practice widespread and adopted by the management levels? Is it understood by financial reports: Financial Statements, the Yearly Report, Form 20 F, notices of material facts, provisions of calculation, estimates, payments to the government and revenue collected by the government etc."; "ELI20 Are the relevant risks related to financial reporting and risk factors ("risk factors") disclosed to the market on Form 20F and / or Petrobras Reference Form and its subsidiaries and affiliates managed by the organization? Is the relevant risk management process disclosed to the market supported by the areas, methodologies and specialized systems of the Company or its own subsidiaries for monitoring their exposure?"

³³³ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG_01788629], sheet "ELI-2012-PB," "ELI49 Are there are policies, guidelines, standards and financial reports disclosure procedures, and unit or function responsible and well able to oversee the entire process of preparation and disclosure of consolidated financial reports, ensuring security, integrity and timeliness in the final approval of such data and financial information before it is made available to the market?"

³³⁴ For example: Petrobras Internal Audit workpaper, ENT 19 - 20, ENT-PB/019_020, October 15, 2012.

³³⁵ Petrobras Internal Audit workpaper, entity level controls, 2012 – 2014, [PBRCG 01788629], sheet "ELI-2012-PB".

³³⁶ PwC did not identify deficiencies in indirect entity-level controls in its 2012 testing. "Report of recommendations for improvement of internal controls and accounting procedures prepared in connection with the audit of financial statements on December 31, 2012," PwC, [PBRCG_00086945 at p.4].

³³⁷ CST 2012 – PB MT, see column E – "Process (Superior): To supply Goods and services."

³³⁸ CST 2012 – PB_MT, see column J – "Name of the Subprocess: [CMP:] To contract Good, [COS:] To manage Contracts of Services, [GBF:] To manage Local Register of Suppliers, [EEG:] To manage Warehouse."

process design and identified the sub-process risk as high or medium.³³⁹ In addition, control owners determined that controls within each sub-process were properly designed.³⁴⁰ Notably, even Dr. Henning concurred that the Company's procurement controls were properly designed:

Based on documentary evidence, it appears that Petrobras management had designed adequate internal controls over the procurement process, including establishing the requirement for competitive bidding.³⁴¹

- 118. In total, Petrobras identified 45 procurement controls in 2012.³⁴² Detailed below are examples of procurement controls:
 - 1) Existence of and adherence to legal procedures for contracting of services, considering a variety of factors.³⁴³
 - 2) Contracts and purchase orders are approved based on predefined limits of authority.³⁴⁴
 - 3) Automatic consistency between the total value of the contract and the sum of the values of items registered in the contract.³⁴⁵
 - 4) Payment release to the supplier is based on previously defined limits of authority.³⁴⁶
- 119. In addition, Petrobras performed specific testing over process level controls in the PP&E process. In 2012, the process relevant to the recording and valuation of PP&E was the "Accounting" internal control process and the relevant sub-process was "PP&E."³⁴⁷ Petrobras followed a similar process to that described above and identified 29 PP&E controls in 2012.³⁴⁸ Detailed below are examples of PP&E controls:
 - 1) Review and approval of monthly expenditures recorded in each investment project.³⁴⁹

³³⁹ CST 2012 – PB MT, see column L – "Risk Subprocess."

³⁴⁰ CST 2012 – PB MT, see column BH – "Status Effectivity."

³⁴¹ Expert Report of Steven L. Henning, Ph.D., CPA, p. 1-15, "Based on documentary evidence, it appears that Petrobras management had designed adequate internal controls over the procurement process, including establishing the requirement for competitive bidding."

³⁴² CST 2012 – PB_MT, total count of the unique controls in column Q – "Control" in the "CMP," "COS," "GBF," and "EEG" sheets

³⁴³ CST 2012 – PB MT, see column Q – "COS21."

³⁴⁴ CST 2012 – PB MT, see column Q – "CMP22."

³⁴⁵ CST 2012 – PB MT, see column Q – "COS25."

³⁴⁶ CST 2012 – PB MT, see column Q – "COS31."

³⁴⁷ CST 2012 – PB_MT, see columns E – "Process (Superior): To accomplish Countable Management" and J – "Name of the Subprocess: [ATI:]...Fixed asset and Intangible."

³⁴⁸ CST 2012 – PB MT, sheet "ATI," total count of the unique controls in column Q – "Control".

³⁴⁹ CST 2012 – PB MT, see column Q – "ATI05."

- 2) Review and approval, by the responsible employee, of the valuation in order for management to identify impairment and proper recording thereof.³⁵⁰
- 120. For each control, Internal Audit documented the control description, performed test procedures, evaluated the results, and concluded on the operating effectiveness of the control.³⁵¹ Internal Audit testing procedures varied by control but generally included inspection of underlying transactions and documentary evidence to ensure that Petrobras adhered to its internal control policies.³⁵² For any ineffective controls, the SOX Certification Group established a remediation plan and also identified compensating controls that mitigated the impact of the deficiency.³⁵³
- 121. In addition, PwC independently tested the design and operating effectiveness of controls, including those related to identifying impairment of PP&E.³⁵⁴ Its procedures were similar to Internal Audit and included gaining an understanding of the sub-process designs, identifying the relevant risks, and testing the design and operating effectiveness of controls.³⁵⁵

4. SOX Certification Results & Evaluation

122. In 2012, the SOX Certification Group communicated ICFR matters to the Audit Committee throughout the year. In May 2012, it presented the SOX certification plan to the Audit Committee, which included the objectives of the certification process, planned involvement of management and Internal Audit, and the status of prior year deficiencies. The SOX Certification Group updated the Audit Committee on the progress of testing in its September and November meetings. In March 2013, after ICFR testing had been completed

³⁵⁰ CST 2012 – PB MT, see column Q – "ATI26."

³⁵¹ CST 2012 – PB_MT, see columns R – "Description of the Control," BV – "Description of the Plan of Test," BW – "Result Tests," and BU – "Result Tests."

³⁵² For example: Petrobras Internal Audit Workpaper, COS21, PB-COS21-REPLAN, June 6, 2012, sheet "General notes - COS21".

³⁵³ CST 2012 - PB MT, see columns CO - "Description Critical point" and "CP - Recommendation."

³⁵⁴ For example: PwC workpaper, Petrobras Control ATI26, Year 2012, [PwCBR_PETRO_000054858].

³⁵⁵ For example: PwC workpapers, Petrobras Control ATI05, Year 2012, [PwCBR PETRO 000054756].

³⁵⁶ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, pp. 17–27, [PBRCG 01260715].

³⁵⁷ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 53rd Audit Committee Meeting, September 3, 2012, p. 19, [PBRCG_01265047] "The Manager Pedro Gauziski de Araújo Figueiredo started his presentation informing about the status of the SOX / CVM certification (Attachment IV – SOX / CVM 480/09 Certification – Year 2012 and Related Parties) He mentioned

for 2012, the SOX Certification Group presented a summary of the SOX certification process to the Audit Committee, including the scope of testing and the results of the self-assessment process and Internal Audit's testing.³⁵⁹ Members of other departments such as Internal Audit, the General Ombudsman's Office, and PwC were also frequently present at these meetings during 2012.³⁶⁰

D. Conclusion

123. Based on the considerations and the analyses discussed above, in my opinion, Petrobras's process of planning, staffing, executing and reporting the effectiveness of its ICFR during the Relevant Period was appropriate and provided Petrobras Leadership a reasonable basis for identifying and assessing any deficiencies in ICFR. It does not appear that Plaintiffs' Experts have considered Petrobras's extensive ICFR system, including the significant time, resources, and effort dedicated to the design, testing, and evaluation of its ICFR, nor the various parties and processes involved in Petrobras's ICFR system. As discussed in Section X.D.2, without the context of Petrobras's ICFR system, an issue examined in isolation may appear to be a "red flag," when it could be, in fact, an example of Petrobras's ICFR working effectively.

IX. Petrobras's Disclosure of its Material Weaknesses

124. Brazilian Federal Police arrested Mr. Paulo Roberto Costa in March 2014, in connection with its investigation into certain money-laundering schemes.³⁶¹ In April 2014, following Mr.

the status and the attention points of the time schedule of the managers' self-evaluations and the internal and external audit tests. He informed the main loose ends and attention points in relation to the Certification's macro-time schedule:..."

³⁵⁸ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 56th Audit Committee Meeting, November 29, 2012, p. 21, [PBRCG_01380050], "Process of Certification SOX - CVM 2012 by the General Manager of Internal Controls Pedro Gauziski de Araújo Figueredo."

³⁵⁹ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, pp. 32–41, [PBRCG 00727994].

³⁶⁰ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 51st Audit Committee Meeting, May 24, 2012, p. 1, [PBRCG_01260715]; Petroleo Brasileiro S.A. – Petrobras, Minutes of the 53rd Audit Committee Meeting, September 3, 2012, pp. 1-2, [PBRCG_01265047]; Petroleo Brasileiro S.A. – Petrobras, Minutes of the 56th Audit Committee Meeting, November 29, 2012, pp. 1–2, [PBRCG_01380050]; Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, pp. 1–2, [PBRCG_00727994].

³⁶¹ C. Stauffer, "TIMELINE-Key moments in Brazil corruption probe," The Wall Street Journal, February 22, 2016, available at http://www reuters.com/article/brazil-petrobras-idUSL1N13P1WU, "March 20, 2014: Federal police arrest the former head of Petrobras' refining and supply department, Paulo Roberto Costa, the result of an investigation that started when they noticed Costa had been given a Range Rover car by convicted black-market money changer Alberto Youssef."

Costa's arrest, Petrobras established several CIAs to evaluate allegations made, related to Mr. Costa's arrest, in certain public press reports.³⁶² However, it was not until early September, 2014 that, media leaks suggested that Operation Lava Jato had expanded to include alleged bribes linked to Petrobras contracts.³⁶³

125. After the media leaks, on September 8, 2014, Petrobras issued a press release announcing that while "it is inappropriate to comment on non-official information published by media outlets" or to "comment on ongoing investigations or on the declarations of individuals or companies under investigation by the Federal Police or by any other authorities," Petrobras was providing all information requested by the Federal Police, the TCU, CGU and the Public Prosecutor's Office.³⁶⁴ In addition, Petrobras reported that it "sent letters to the companies cited by the media outlets requesting information regarding the existence of its contracts with the companies connected to [suspected money launderer] Mr. Alberto Youssef and on any involvement with the activities [that are the] object of this investigation."³⁶⁵

126. A month later, on October 8, 2014, the Brazilian federal court released deposition testimony from Mr. Costa and Mr. Youssef, which described for the first time, a cartel of Brazilian contractors and suppliers and a kickback scheme related to certain Petrobras construction contracts.³⁶⁶ Later that month, Petrobras disclosed steps taken to investigate the

³⁶² PwC, Forensic Services Memo Review of Management's Investigations (CIAs), March 20, 2015, [PwCBR_PETRO_000135739 - PwCBR_PETRO_000135890] p. 5 "Such management investigations are carried out by ad-hoc Commissions, (Comissao intern Apuracao or CIA) formed by the relevant business unit manager or executive officer to investigate the allegations. This is done pursuant to a formal Company policy, Review Procedure PP-OV4-00056-F. The principal management investigations were the result of allegations under investigation by the Federal Prosecutor in a wide ranging money laundering investigation called Operacao Lava Jato ('Lava Jato')."

³⁶³ Petróleo Brasileiro S.A. – Petrobras Form 6-K filed September 9, 2014, p. 2, "Petrobras announces that since Friday, 09/05, media outlets have been publishing materials containing Petrobras's name based on non-official information obtained from Mr. Paulo Roberto Costa's alleged testimony to the Federal Police"; *See also*: K. Eeuwens and A. Galvao, "Rousseff Ally Says Petrobras Scandal Seeks to Derail Brazil Vote," Bloomberg, September 7, 2014, "Brazilian President Dilma Rousseff's secretary general said information leaked to local media from a police investigation into alleged kickbacks involving state-run Petroleo Brasileiro SA is an attempt to alter the results of the October national election. Veja magazine reported this weekend that a group of politicians, including members and allies of Rousseff's Workers' Party, were allegedly receiving bribes linked to Petrobras contracts. The Sao Paulo-based magazine said the list of names allegedly involved were revealed by Paulo Roberto Costa, Petrobras's former head of refining, during testimony to the federal public prosecutor," available at http://www.bloomberg.com/news/articles/2014-09-08/rousseff-ally-says-petrobras-scandal-seeks-to-derail-brazil-vote.

³⁶⁴ Petróleo Brasileiro S.A. – Petrobras Form 6-K filed September 9, 2014, p. 2.

³⁶⁵ Petróleo Brasileiro S.A. – Petrobras Form 6-K filed September 9, 2014, p. 2.

³⁶⁶ Paulo Roberto Costa Deposition, October 7, 2014, 3:32–35, 4:9–15 "Federal Judge: - About the schemes narrated here by the Public Prosecutor, of the misappropriation of Petrobras funds, through these companies, hired by Petrobras, what can you tell me? Questioned [Costa]: -Very well. Actually, what happened inside Petrobras, specially from 2006 forwards, was a process of cartelization... And this cartelization obviously results in an excess price delta, right? In the oil and gas area, these companies, usually, between the indirect costs and their profits, the so-called BDI, they usually put in something between 10% to 20%, so, depending on the work, on the risk of the work, the...condition of the project, then from 10% to 20% for this BDI. What happened in the works of Petrobras specifically? Let's say the BDI was 15%? So usually, an average of 3% was put in

allegations. For example:

- Petrobras established several CIAs during 2014 to "examine evidence or facts perpetrated against the company;"
- Petrobras requested and was granted access to records from Lava Jato;
- Petrobras hired two outside law firms Brazilian firm Trench, Rossi e Watanabe
 Advogados, and US firm Gibson, Dunn & Crutcher LLP to examine the nature,
 extent and impact of the actions that may have been committed against the Company
 in the context of the claims made by Mr. Costa.³⁶⁷
- 127. Due to the uncertainty surrounding the impact of the information revealed through the Lava Jato investigation on the financial statements, Petrobras delayed filing its third-quarter 2014 results, originally scheduled to be issued November 14, 2014. Petrobras explained that the charges against Mr. Costa, "if found to be true, could potentially affect the company's financial statements." Petrobras released its Q3 2014 financial statements that were not reviewed by its independent auditors, PwC, on January 28, 2015, and eventually issued revised Q3 2014 financials that were reviewed by PwC on April 22, 2015. 369
- 128. The allegations by Mr. Costa in late 2014 were taken into account by Petrobras as it assessed whether it had a material weakness in its ICFR.³⁷⁰ After completing its assessment, Petrobras concluded that its ICFR was ineffective as of December 31, 2014. Petrobras's 2014

additionally. And these 3% were allocated to political agents."; Alberto Youssef Deposition, October 7, 2014, 29:25-30. "Questioned [Youssef]: -Well, the knowledge I have is that every company that had a construction of Petrobras, some of them really paid, some didn't pay, but all of them had to pay 1% to the Downstream area and 1% to the service area. Federal Judge: -And were these values intended for the distribution for public agents? Questioned: -Yes, for public agents and also for Paulo Roberto Costa, who was Downstream Director."

³⁶⁷ Petróleo Brasileiro S.A. – Petrobras Form 6-K filed November 14, 2014 6-K, p. 2, "on October 24 and 25, 2014 Petrobras hired two independent law firms specialized in conducting investigations – Brazilian firm Trench, Rossi e Watanabe Advogados and U.S. firm Gibson, Dunn & Crutcher LLP – to examine the nature, extent and impact of the acts that may have been committed within the context of the allegations made by former Downstream Director Paulo Roberto Costa, as well as to investigate related facts and circumstances that have a significant impact on the company's business operations"; Marcos Panassol Deposition, April 19, 2016 Exhibit 14 - Attachment, [PCRCG_01451526 p. 6], "On December 23, 2014 the Board of Directors approved the formation of a Special Committee that will serve as a reporting line for the independent internal investigation firms Trench, Rossi e Watanabe and Gibson, Dunn & Crutcher".

³⁶⁸ Petróleo Brasileiro S.A. – Petrobras Form 6-K filed November 14, 2014, p. 2

³⁶⁹ Petrobras Minutes of the 88th Audit Committee Meeting, April 22, 2015, p. 1, [PBRCG_00914191]. "The results for the third quarter had been previously disclosed, on January 28, 2015, without the opinion of PricewaterhouseCoopers; Petrobras Q3 2014 Financial Statements, p.3.

³⁷⁰ Marcos Panassol Deposition, April 19, 2016, 205:9–22, "Q. And the first time you became aware that Petrobras's internal controls may suffer from material weakness was when?...A. At this moment here we were discussing with the company that the company, in light of the deposition of Paulo Roberto Costa and any other information that they could have identified in their internal investigation, they would have – they would need to assess their internal controls to determine whether there was an inefficiency. This is a discussion that was ongoing at that time in November."

Annual Report, issued on May 15, 2015, disclosed the following material weaknesses related to management override of controls:³⁷¹

During 2014, our management identified certain decisions taken during the period between 2004 and April 2012, specifically relating to our large investment projects in the Exploration and Production, Refining, and Gas and Power business segments that did not comply with our existing internal controls over the process of contracting services in these segments. The internal controls over contracting of services include procedures such as the Petrobras Contracting Manual (Manual da Petrobras de Contratação – MPC) and the Investment Projects Corporate Procedures (Sistemática Corporativa de Projetos de Investimento).

In some of our contracting processes, one or more senior managers, together with third parties (namely, some of the contractors and suppliers involved in the construction projects), colluded to eliminate, infringe upon, override or circumvent these controls, which resulted in the commission of wrongful acts contrary to our interests and policies. Our management has identified the following internal control deficiencies related to the failure to detect these acts that together constitute a material weakness in our control environment: (i) inadequate "tone at the top" regarding internal controls; (ii) failure to communicate the ethical values prescribed in our Code of Conduct; and (iii) lack of an effective whistleblower program.

These deficiencies contributed to our failure to prevent an overstatement of property, plant and equipment.^{372,373}

- 129. Petrobras disclosed in its 2014 20-F that it had implemented, or was in the process of implementing, remediation efforts to address its material weakness related to management override of controls:³⁷⁴
 - <u>Governance, Risk, and Compliance Department</u>: Petrobras created a new Governance, Risk and Compliance Department "to improve Petrobras's procedures

³⁷¹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p.1, "As filed with the Securities and Exchange Commission on May 15, 2015."

³⁷² Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 175.

³⁷³ Petrobras also disclosed material weaknesses related to review and approval of manual journal entries, controls related to property, plant and equipment, and access management in business and IT processes and segregation of duties in its ERP environment. Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, pp. 175–176.

³⁷⁴ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, pp. 177–178, "We are implementing the following remedial measures in response to the material weakness relating to management override of controls".

- and guidelines, and to ensure such procedures and guidelines are being observed by Petrobras's management and employees."³⁷⁵
- Chief Governance, Risk and Compliance Officer: in late November 2014,
 Petrobras's Board of Directors created a new executive officer position, the Chief
 Governance, Risk and Compliance Officer, who "is charged with ensuring that
 Petrobras's procedures and guidelines are being observed by Petrobras's management
 and employees, that Petrobras complies with applicable laws and regulations and that
 risks of fraud and corruption are mitigated."376 In January 2015, the Board of
 Directors appointed Mr. João Adalberto Elek to the position.
- <u>Independent Investigation</u>: as discussed above, Petrobras engaged two independent law firms "to conduct an independent internal investigation regarding, among other matters, the nature, extent and impact of alleged improper actions by former Petrobras personnel."³⁷⁷
- Special Committee: In December 2014, Petrobras's Board of Directors formed a Special Committee, which reported directly to the Board of Directors, and served as a direct reporting line from the law firms performing the independent investigation to the Board of Directors.³⁷⁸ The Special Committee was composed of three members: (1) Ms. Ellen Gracie Northfleet, retired Minister of the Brazilian Supreme Court, (2) Mr. Andreas Pohlmann, Chief Compliance Officer of Siemens AG from 2007 to 2010, and (3) Petrobras's Chief Governance, Risk and Compliance Officer.³⁷⁹

³⁷⁵ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-Fp. 177. Petrobras disclosed that the "creation of a Governance, Risk and compliance Department and the reflection of its work into our highest levels of decision-making demonstrates the firm commitment of senior management to the execution and monitoring of compliance programs (tone at the top)."

³⁷⁶ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 121.

³⁷⁷ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 177.

³⁷⁸ Marcos Panassol Deposition, April 19, 2016, Exhibit 14 - Attachment, [PCRCG_01451526 at p. 6], "On December 23, 2014 the Board of Directors approved the formation of a Special Committee that will serve as a reporting line for the independent internal investigation firms Trench, Rossi e Watanabe and Gibson, Dunn & Crutcher. This Committee will act independently and will have a direct reporting line with the Board of Directors. Among its responsibilities are the approval of the Investigation Plan; the assurance of investigation independence and that it is not prevented or obstructed; as well as the preparation of a final report about the investigation results, including recommendations regarding internal policies and procedures. The Special Committee will be composed by 3 members: two independent individuals from outside the Company and our new Compliance, Risk and Governance Officer. The Brazilian independent member will be Mrs. Ellen Gracie Northfleet, retired Minister of the Brazilian Supreme Court, and the independent foreign member will be Mr. Andreas Pohlmann, Chief Compliance Officer of Siemens AG from 2007 to 2010."

³⁷⁹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. F-13.

- Improvements to Governance and Compliance System: Petrobras implemented measures to improve its governance and compliance systems "to ensure legal and procedural compliance and mitigate risks, including those related to fraud and corruption."³⁸⁰ The measures included improvements to its whistleblower hotline, improved whistleblower protections, training programs for employees and improved disciplinary proceedings.³⁸¹ In addition, in November 2014, Petrobras's Executive Board "approved Petrobras's Conduct Guide, which contains the guidelines to implement Petrobras System Code of Ethics...and other internal regulations."³⁸² In February 2015, "Petrobras's procurement guidelines were amended to subject all of Petrobras's suppliers and service providers to Petrobras's Conduct Guide."³⁸³
- Procurement Guidelines and Investment Projects: In addition, Petrobras disclosed that it was (1) "updating our procurement guidelines and corporate procedures to expressly require an analysis of price proposals submitted by bidders, and a comparison with internal reference prices," (2) "improving controls related to the review of the financial, tax, technical and legal terms of service contracts, prior to completion of the bidding process," and (3) "modifying our Investment Projects Corporate Procedures to require detailed terms for the duration and cost of projects from the commencement of the process for construction and assembly services." 384
- 130. As a result of its ongoing investigation, in 2014, Petrobras temporarily suspended 32 companies from submitting bids for new contracts and services.³⁸⁵ In addition, Petrobras began taking procedural steps to seek compensation for the damages it suffered from the improper

³⁸⁰ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 177

³⁸¹ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, p. 177, "We have implemented measures to improve our governance and compliance systems aiming to ensure legal and procedural compliance and mitigate risks, including those related to fraud and corruption. This includes improvements in our hotline for receiving complaints, improved whistleblower protections, training programs for our employees and improved disciplinary proceedings."

³⁸² Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F p. 180.

³⁸³ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F p. 180.

³⁸⁴ Petróleo Brasileiro S.A. – Petrobras 2014 Form 20-F, pp. 177 – 178.

³⁸⁵ Petróleo Brasileiro S.A. – Petrobras 2015 Form 20-F, p. 21, "In 2014, we temporarily suspended the ability of 32 companies belonging to 23 corporate groups to participate as suppliers and contractors in future bids for new contracts and services with us, while we and the Brazilian authorities analyzed the involvement and participation of these companies in alleged illegal conduct in connection with the Lava Jato investigation. In 2015, this suspension was extended to two other companies. Since then, three companies have met the requirements necessary for lifting the suspension, and 31 remain suspended." In 2015 Petrobras suspended two additional companies. Petróleo Brasileiro S.A. – Petrobras 2015 Form 20-F p. 21, "In 2015 this suspension was extended to two other companies."

payments scheme.³⁸⁶ The Lava Jato investigation is ongoing as of the date of this report. Based on my professional experience and review of the materials listed in Appendix C, Petrobras's response in 2014 to allegations of corruption related to the Illicit Payment Schemes was reasonable.

- 131. Plaintiffs, however, claim that Petrobras made "false statements of material fact and omission" regarding "whether the Company suffered from material weaknesses in its disclosure controls and procedures and internal controls over financial reporting."³⁸⁷ Petrobras Leadership has not testified that opinions expressed regarding the effectiveness of Petrobras's ICFR during the Relevant Period were not made in good faith and were sincerely held at the time. It was not until the revelation of the Illicit Payment Schemes that Petrobras Leadership became aware of management override of controls. If, prior to the discovery of the payment schemes, Petrobras Leadership sincerely believed, based on the extensive process of planning, staffing, executing, evaluation, and testing of ICFR, that ICFR was effective, it would be appropriate for Petrobras to disclose that its ICFR were operating effectively. I saw no evidence that, at the time Petrobras issued its Form 20-F for each of the years ended December 31, 2010, 2011, 2012 and 2013, Petrobras Leadership knew of material weaknesses in its ICFR that it failed to disclose.
- 132. Further, when a company identifies material weaknesses in ICFR, it is only required to consider the impact on ICFR in prior years when a company reissues prior period financial statements.³⁸⁸ Petrobras has not reissued any prior period financial statements.³⁸⁹ As such,

³⁸⁶ Petróleo Brasileiro S.A. – Petrobras 2015 Form 20-F, p. F-10 – F-12, "Accordingly, the Company joined five public civil suits addressing acts of administrative misconduct, with the Brazilian Public Prosecutor's Office on February 20, 2015, and in another suit with the same subject filed by the Federal Government, including demands for compensation for reputation damages."

³⁸⁸ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], pp. 39 – 40, "4. Impact of a Restatement of Previously Issued Financial Statements on Management's Report on ICFR Item 308 of Regulation S-K requires disclosure of management's assessment of the effectiveness of the company's ICFR as of the end of the company's most recent fiscal year. When a material misstatement of previously issued financial statements is discovered, a company is required to restate those financial statements. However, the restatement of financial statements does not, by itself, necessitate that management consider the effect of the restatement on the company's prior conclusion related to the effectiveness of ICFR. While there is no requirement for management to reassess or revise its conclusion related to the effectiveness of ICFR, management should consider whether its original disclosures are still appropriate and should modify or supplement its original disclosure to include any other material information that is necessary for such disclosures not to be misleading in light of the restatement. The company should also disclose any material changes to ICFR, as required by Item 308(c) of Regulation S-K."

³⁸⁹ Mr. Devor and Dr. Henning also opine or imply that Petrobras's 2010-2013 financial statements should have been restated because they contained material misstatements related to PP&E. *For example*: Expert Report of Harris L. Devor, CPA, May 6, 2016, ¶ 214, "Finally, discovery indicates, in my opinion, that the Company (and PwC) was well aware, by the time it recorded the significant adjustments to the Company's financial statements in the third and fourth quarters of 2015 (if not well before that) of the magnitude and the breadth of overpayments that had occurred on its construction-related contracts throughout the foregoing timeframe, which would have required restating prior period financial statements."; Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 5-5, "Based on my analysis…Petrobras' financial statements were quantitatively

Petrobras was not required to reassess the effectiveness of its ICFR in prior periods.

X. Flaws in Dr. Henning's and Mr. Devor's Analyses of Petrobras ICFR

- 133. In his report, Dr. Henning opines that "Petrobras's Executive Board and its Board of Directors should have known that the Company's senior management had failed to ensure the effective operation of internal controls over financial reporting" and that "these failures led to material weaknesses in internal control."³⁹⁰ Mr. Devor reaches a similar conclusion.³⁹¹
- 134. However, Dr. Henning's and Mr. Devor's analyses and conclusions related to Petrobras's ICFR are flawed for several reasons.
- 135. First, Plaintiffs' Experts fail to consider the limitations of ICFR, which, as discussed in Section X.A., cannot provide absolute assurance against errors or fraud.
- 136. Second, Plaintiffs' Experts inappropriately use hindsight. As discussed in Section X.B., the assessment of whether alleged "red flags" are indicative of a material weakness should be based on information known at time and in the context of which they were known.
- 137. Third, Plaintiffs' Experts frequently discuss internal control in broad terms and fail to differentiate between ICFR and internal controls related to operational and compliance matters. As discussed in Section X.C., alleged "red flags" that do not pertain to the reliability of Petrobras's financial reporting³⁹² are irrelevant to a company's ICFR assessment.
- 138. Fourth, a proper evaluation of alleged "red flags" requires the consideration of several factors. Those factors include an evaluation of relevant factual information, a sufficient understanding of Petrobras's ICFR system, and to the extent that an ICFR deficiency is identified, an evaluation of the severity of the deficiency based on information that was available to Petrobras Leadership at the time. As discussed in Section X.D., Plaintiffs' Experts have not

materially misstated for the years ended December 31, 2009 through 2014.; I understand from the expert report of J. Duross O'Bryan, CPA, that the write-off in the third quarter of 2014 was reasonable and that the prior period financial statements did not require restatement.

³⁹⁰ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p iii.

³⁹¹ For example: Expert Report of Harris L. Devor, CPA, May 6, 2016, ¶ 397, "PwC Brazil should have identified this impropriety and, in view of the many red flags of which it was aware in connection with its audit(s), especially as such related to the costs associated with constructing RNEST and Comperj, and the comments of Mr. da Cunha, among other things, should have caused the Company to alter its accounting, qualify its opinion as a result of this matter, and/or conclude that a deficiency existed in the Company's system of internal controls over financial reporting in this area."

³⁹² As previously noted, controls related to a company's compliance with laws that directly relate to the company's financial reporting are included in ICFR.

performed such an evaluation or considered these factors. Specifically, Plaintiffs' Experts have misrepresented and ignored relevant facts, do not appear to have considered elements of Petrobras's ICFR system, and have not assessed, without the benefit of hindsight, the severity of any potential deficiency.

A. Plaintiffs' Experts Fail to Consider the Limitations of ICFR

139. Dr. Henning claims that Petrobras's senior management was "responsible for the breakdown of internal controls by overriding the control activities in place, thereby establishing a tone at the top that was not conducive to accurate and reliable financial reporting." However, Dr. Henning ignores the limitations of ICFR, including that collusive frauds involving management override are difficult to prevent and can occur in any control environment.

140. As discussed in Section VII., due to its inherent limitations, ICFR can provide reasonable, but not absolute assurance against errors and fraud. In particular, otherwise effective ICFR can be circumvented by the collusion of two or more people or by management's override or circumvention of controls. The corruption schemes at issue in this matter involved certain Petrobras employees and contractors that colluded to perpetrate a fraud on Petrobras. The Petrobras employees that were involved were in a position to override or circumvent controls and avoid detection. It is well known that collusion of this kind and magnitude is difficult to prevent or detect. For example:

Two types of financial frauds deserve special attention. Management override of controls and collusion, the coordination of multiple persons toward a common objective, are frauds that are *always possible* (in *any* internal control environment) and are the *absolute hardest frauds to prevent*. Moreover, these frauds are difficult to detect, especially collusion.³⁹⁴

141. The occurrence of specific instances of management overrides for the purpose of perpetrating a fraud does not necessarily suggest that a company's overall tone at the top is inappropriate or its ICFR is ineffective. As Dr. Henning points out by quoting Petrobras's description of management override of controls, the material weakness identified in 2014 was the result of three internal control deficiencies that **together** constituted a material weakness: (i)

³⁹³ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 2-5.

³⁹⁴ Fraud Auditing and Forensic Accounting, Tommie W. Singleton, Aaron J. Singleton, G. Jack Bologna, Robert J. Lindquist, p. 64.

inadequate "tone at the top" regarding internal controls (ii) failure to communicate the ethical values prescribed in the company's Code of Conduct and (iii) lack of an effective whistleblower program.

B. Plaintiffs' Experts Inappropriately Use Hindsight

- 142. When evaluating whether alleged "red flags" are indicative of a material weakness in ICFR, it is important to assess the alleged "red flags" based on information that was known at the time and in the context in which they were known. As discussed in Section VII.A, the implementation and evaluation of ICFR requires significant judgment. When assessing whether Petrobras Leadership had a reasonable basis for the opinion on the effectiveness of Petrobras's ICFR at December, 31, 2010, 2011, 2012 and 2013, it is inappropriate to consider information that only became known in subsequent periods.
- 143. Plaintiffs' Experts' Reports suffer from hindsight bias in that they are based on an after-the-fact identification of "red flags" in a historical record. For example, Plaintiffs' Experts inappropriately rely on CIAs that were instituted in 2014, after Mr. Costa's arrest.³⁹⁵ As another example of hindsight, Dr. Henning's criticizes the effectiveness of the whistleblower channel based on testimony from Mr. Cunha.³⁹⁶ However, Mr. Cunha did not join the Board of Directors until April 29, 2013, *after* the Cartel had ceased to operate.³⁹⁷ Further, Mr. Cunha points out that a contemporaneous evaluation of Petrobras's governance system in March 2013 by Standards & Poor's found Petrobras's governance system "was considered to be one of the best in Latin

³⁹⁵ For example: Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-27, "In evaluating contracts related to the RNEST capital project, the Petrobras CIA noted a trend wherein the value of the proposals submitted in the re-bid were close to the tolerance ceiling established by the internal budget."; p. 1-28, "With regard to several contracts for RNEST, the Petrobras CIA noted that no new companies were engaged in the process after the first bidding round was cancelled, contrary to Brazilian regulations."

³⁹⁶ Expert Report of Steven L. Henning, Ph.D., CPA, pp. 1-14 – 1-15, "Mr. Cunha testified to his disbelief that such egregious disregard for internal controls could have gone completely unreported through the Company's whistleblower hotline, a further testament to the poor control environment cultivated by Petrobras executive management:

^{&#}x27;Over the course of my stay at the audit committee it was striking that we had not received any significant information on corruption problems. Throughout 2014 it struck me that I found the answer, and that was that the person in charge of the whistle blowing channel happened to be the former aide of the chief of staff of government who is now in jail...That was Mr. Otto, Paulo Otto Spurling. From statements of board member Sinedino repeatedly on the board and I believe on the minutes, he said that employees of Petrobras didn't feel safe by blowing the whistle, and it is understandable if the channel is managed by people who as we now see is implicated in the scandal."

³⁹⁷ Petróleo Brasileiro S.A. – Petrobras Form 6-K filed April 29, 2013, "IV. Election of the following as Members of the Board of Directors...Mr. Mauro Gentile Rodrigues da Cunha."

America."398

C. Plaintiffs' Experts Fail to Distinguish Between ICFR and Operational or Compliance Controls

- 144. In order to assess whether an alleged "red flag" suggests that Petrobras had a deficiency in ICFR, it is important to consider whether the alleged "red flag" relates to (1) the effectiveness and efficiency of operations, (2) the reliability of financial reporting, or (3) compliance with applicable laws and regulations. As discussed in Section VII.A, ICFR does *not* encompass the COSO elements that pertain to the effectiveness and efficiency of operations, or a company's compliance with applicable laws and regulations, unless those laws directly relate to the company's financial reporting. Plaintiffs' Experts frequently discuss internal control in broad terms and fail to differentiate between ICFR and internal controls related to operational and compliance matters. Alleged "red flags" that do not pertain to the reliability of Petrobras's financial reporting are irrelevant to a company's ICFR assessment.³⁹⁹
- 145. Operational controls and practices are often distinct from the controls necessary to ensure the accuracy of financial reporting. In particular, a business decision or operational activity that results in less than optimal performance for a company can be completely unrelated to ICFR. For example, IFRS and GAAP do not require a company to obtain the lowest possible price in conjunction with the purchase of an asset.⁴⁰⁰ Accordingly, the purpose of ICFR is not to prevent a company from overpaying; rather, the purpose of ICFR is to ensure that the financial statements properly reflect the terms of the transaction.
- 146. Plaintiffs' Experts refer to several "red flags" that allegedly indicate that Petrobras had ICFR deficiencies, such as:

³⁹⁸ Mauro Rodrigues da Cunha Deposition, April 18, 2016, 172:6-15, "A. Because again, we are talking about a very detailed system of procedures, rules, bylaws, checks and balances which would pass the most stringent analysis based on checking boxes, and it was not even surprising that on March 2013 right before I joined and when the problems were already happening at Petrobras, Standard & Poor's evaluated the governance system of Petrobras through such a check the box approach and it was considered to be one of the best in Latin America."

³⁹⁹ As previously noted, controls related to a company's compliance with laws that directly relate to the company's financial reporting are included in ICFR.

⁴⁰⁰ I understand from the expert report of J. Duross O'Bryan, CPA, that the question of whether accounting is proper does not depend on whether the company got the best price for an asset on its balance sheet.

- "in several instances with regard to the REPAR refinery construction, companies with insufficient qualifications were invited to bid."401
- "On certain Comperj contracts, the start dates of the projects were established without fully considering the technical criteria." 402
- "Mr. da Cuhna called attention to certain companies which Petrobras had continued to give supply and contracting business, even though these companies' contracts and practices had been rejected by Petrobras' Internal Auditors."
- "The TCU concluded that poorly determined contract terms were indicative of project planning failures, causing several onerous contract amendments for Petrobras."
- 147. However, these issues relate primarily to operational controls or business decisions, both of which are irrelevant to a company's ICFR assessment.

D. A Proper Assessment of "Red Flags" Requires Consideration of Several Factors

148. In order to conclude that an alleged "red flag" could have or should have indicated a material weakness to Petrobras Leadership at the time the "red flag" was identified, several factors must be considered. First, it is important to consider relevant factual information. For example, it is inappropriate to rely on testimony from one witness, without evaluating other factual information that pertains to the issue. As I discuss in Section X.D.1, Plaintiffs' Experts have misrepresented and ignored relevant facts, and thus have failed to consider relevant factual information.

⁴⁰¹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-25, "As early as 2009, the TCU found that, in several instances with regard to the REPAR refinery construction, companies with insufficient qualifications were invited to bid."

⁴⁰² Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-29, "On certain Comperj contracts, the start dates of the projects were established without fully considering the technical criteria. For example, the acquisition of goods and the construction of principal units was initiated, even though the overall business model for the refinery had yet to be finalized. Thus, Petrobras faced the risk that adjustments to the refinery's ultimate business model may significantly impact these large purchases, resulting in unnecessary work and cost overruns. Other Comperj contracts required multiple amendments since there was a lack of definition in the contract regarding certain required off-site and off-shore projects."

⁴⁰³ Expert Report of Harris L. Devor, CPA, May 6, 2016, ¶260, "During a Petrobras Board of Directors meeting held on September 13, 2013, for which PwC obtained and review the minutes, Mr. da Cuhna called attention to certain companies which Petrobras had continued to give supply and contracting business, even though these companies' contracts and practices had been rejected by Petrobras' Internal Auditors."

⁴⁰⁴ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-28 – 1-29, "The TCU concluded that poorly determined contract terms were indicative of project planning failures, causing several onerous contract amendments for Petrobras. There were also flaws in the definition of risks and responsibilities per the contracts, which are essential elements for determining whether the proposal represented a reasonably priced offer."

- 149. Second, in order to determine whether a "red flag" could have or should have indicated a *deficiency* in Petrobras's ICFR, one must understand the "red flag" in the context of Petrobras's ICFR system. As discussed in Section X.D.2, based on the discussions in their reports, Plaintiffs' Experts do not appear to have assessed "red flags" in the context of Petrobras's ICFR system. Without the context of Petrobras's ICFR system, an issue examined in isolation may appear to be a "red flag," when it could be, in fact, an example of Petrobras's ICFR working effectively.
- 150. Third, if based on result of the previous considerations, one determines that a "red flag" should have indicated a deficiency of ICFR, one must then assess the severity of the deficiency based on information that was available to Petrobras Leadership at the time. As discussed in Section X.D.3., Plaintiffs' Experts have not assessed, without the benefit of hindsight, the severity of any potential deficiency.

1. Plaintiffs' Experts Misrepresent and Ignore Relevant Facts

151. In evaluating whether alleged "red flags" could have or should have indicated a material weakness in Petrobras's ICFR to Petrobras Leadership at the time the "red flag" was identified, it is first important to consider relevant factual information on the particular issues. Dr. Henning and Mr. Devor not only fail to limit themselves to information that was available at the time, they compound their errors by referring to certain "evidence" of "red flags" based on an incomplete evaluation and/or discussion of the record. In the following sections, I have provided examples where a further evaluation of the record reveals that Plaintiffs' Experts have misrepresented or ignored relevant facts that suggest that the "evidence" presented by Plaintiffs' Experts are not, in fact, "red flags."

a. Dr. Henning Fails to Consider Evidence that Contradicts Ms. Fonseca's Testimony

152. Ms. Venina Velosa da Fonseca served as the Executive Manager of Corporate Supply at Petrobras from 2005-2009.⁴⁰⁵ In his report, Dr. Henning describes Ms. Fonseca as a

⁴⁰⁵ Venina Velosa da Fonseca Deposition, February 16, 2016, 18:12–20, "Q. Did you at any point during your employment at Petrobras hold any executive positions?...A. Yes, I did. Q. Which ones? A. A corporate supply executive manager. Q. In which department? A. Supply. Q. When did you hold that position? A. From second half of 2005 through October 2009." Velosa also

"whistleblower" who was reprimanded and retaliated against for "challenging the questionable financial reporting and corporate policies ignored, or even promoted, by Petrobras executive management." Specifically, Dr. Henning discusses (1) "certain evidence that came to light in September 2008 that payments had been made by Petrobras for services that were never provided," (2) overbillings related to construction projects such as RNEST, (3) the demotion in 2009 of her colleague, Mr. Fernando Sa for becoming suspicious about the existence of a cartel, 409 and (4) retaliation in which Ms. Fonseca was relocated to Singapore. 410 Dr. Henning further claims:

There was a conscious effort by Petrobras's executive management to ignore the issues brought to their attention, and to purposefully fail to perform proper investigations when faced with clear violations of the Company's internal controls and numerous red flags indicating potential fraudulent activity within Petrobras's procurement process. It is these attitudes of executive management that breed a control environment accepting of unethical, and even illegal, activity.⁴¹¹

153. It is unclear how Dr. Henning can claim that Petrobras management "ignored issues" and "purposefully fail[ed] to perform proper investigations" when he does not cite to the investigations that were performed as a result of issues raised by Ms. Fonseca and Mr. Sa. Dr. Henning relies, almost exclusively, on selected portions of Ms. Fonseca's February 16, 2016 deposition testimony and generally fails to cite to contemporaneous documents that support Ms. Fonseca's assertions.⁴¹² Ms. Fonseca's testimony is based on her recollection and incomplete

held positions in Singapore as the Office General Manager (Venina Velosa da Fonseca Deposition, February 16, 2016, 147:18-21), and Head of Marketing and Business (Venina Velosa da Fonseca Deposition, February 16, 2016, 146:5-6) in Brazil.]]

⁴⁰⁶ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-10. "Furthermore, Petrobras' executive management reprimanded Ms. Fonseca, for being a whistleblower and following through on her investigation."; p. 1-9. "These sentiments were echoed by the Executive Manager of Corporate Supply, Venina Velosa da Fonseca, who testified as to her experiences in challenging the questionable financial reporting and corporate policies ignored, or even promoted, by Petrobras executive management."

⁴⁰⁷ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-9, "According to Ms. Fonseca, within one of the divisions under her purview certain evidence came to light in September 2008 that payments had been made by Petrobras for services that were never provided."

⁴⁰⁸ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-11, "Ms. Fonseca testified that Petrobras' Board of Executive Officers clearly had knowledge of the overbillings with regard to construction projects, such as RNEST."

⁴⁰⁹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-12, "Fernando Sa filed a complaint regarding the cartel and instead of the officer at the time Nilton Maia...request[ing] an investigation of the cartel, they requested an investigation of Fernando. After this investigation...he was demoted."

⁴¹⁰ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-12, "[T]he Petrobras Board of Executive officers again subordinated the best interests of the Company, ultimately retaliating against Ms. Fonseca by demoting her from the executive manager level of the Company in November 2009 and relocating her to Singapore."

⁴¹¹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-13 – 1-14.

⁴¹² Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, footnotes 20-39.

knowledge of facts related to events that occurred over six years ago. Further, as I discuss below, Dr. Henning fails to address contemporaneous documents and other deposition testimony, including Ms. Fonseca's own testimony, that contradict the Fonseca testimony upon which he bases his opinions.

(1) The Geovane de Morais Investigations

154. Dr. Henning states that Ms. Fonseca became aware of evidence in 2008 (1) that Petrobras had made payments for certain services that were never provided and (2) the amount of those payments exceeded the authorization level of Geovane de Morais, a manager in the Downstream area for Institutional Communications. Dr. Henning states that "Ms. Fonseca was concerned because 'there was a whole scheme created...to allocate the costs so that they would not be detected." According to Dr. Henning, because Petrobras conducted only a "superficial investigation" into the irregularities that "did not reflect evidence regarding the payments for unreceived services that Ms. Fonseca knew existed," Ms. Fonseca initiated a second investigation into the matter. Dr. Henning then claims that "[a]s a result of the 'irregularities' found by the [second] independent investigation, Ms. Fonseca made the decision to terminate" Mr. Morais. Dr. Henning further claims that Mr. Gabrielli purposely overrode "Ms. Fonseca's correcting action" and later re-instated Mr. Morais, "thereby, ignoring the internal control deficiencies" and "clearly...not nutur[ing] a control environment built on high ethical standards."

155. Dr. Henning inappropriately accepts Ms. Fonseca's characterization of events without evaluating contemporaneous documents and other evidence that are inconsistent with Ms.

⁴¹³ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-9, "According to Ms. Fonseca, within one of the divisions under her purview certain evidence came to light in September 2008 that payments had been made by Petrobras for services that were never provided. The amounts of the payments were also higher than the division manager's authorization level."

⁴¹⁴ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-9.

⁴¹⁵ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-9, "They conducted "a superficial investigation," then issued a report that did not reflect evidence regarding the payments for unreceived services that Ms. Fonseca knew existed. Ms. Fonseca then created her own independent committee to conduct an unbiased investigation..."

⁴¹⁶ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-10, "As a result of the "irregularities" found by the independent investigation, Ms. Fonseca made the decision to terminate one employee. Mr. Gabrielli later reinstated the same employee, thereby, ignoring the internal control deficiencies that led to the 'irregularities' discovered and purposefully overriding Ms. Fonseca's correcting action to terminate the responsible party. Clearly, such actions by the Chief Executive Officer do not nurture a control environment built on high ethical standards."

Fonseca's testimony. While Ms. Fonseca claims that she was initially "met with a loud, angry rebuke" when she brought her concerns to Mr. Costa, and implies that the initial investigation only occurred due to her insistence, 417 the documents I have reviewed suggest otherwise.

Petrobras initiated a CIA on December 5, 2008 to "investigate indications of irregularities in the management of AB-CR/GC/CI" only two days after Ms. Fonseca sent an email to Mr. Costa to recommend an investigation. 419 The CIA issued its conclusions on December 19, 2008, finding excessive amounts of ZPQS (payments of small amounts) in the communications department of Downstream from 2006-2008, and that Mr. Morais exceeded the amount of ZPQS payments he was authorized to make, in violation of Petrobras's rules and procedures. 420 The CIA report recommended that Petrobras "examine the possibility of applying a disciplinary sanction" to Mr. Morais due to the "irregularities detected by the Commission, in breach of the Company's Rules and Procedures and the Limit of Authority for Payments of Small Services." 3421

156. While Dr. Henning implies that this first CIA ignored evidence that "Ms. Fonseca knew existed," the CIA report explicitly recommended that Petrobras conduct further investigation because certain documents "were not analyzed" due to "lack of time." In a handwritten note, Mr. Costa reiterated the need for further investigation:

Accordingly, after assessing the recommendations of the aforementioned Report, with the implementation of the arrangements for putting these recommendations

⁴¹⁷ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-9, "Ms. Fonseca stated that she first contacted Mr. Costa...to notify him of the 'irregularities" and was met with a loud, angry rebuke. After she insisted on an investigation, Mr. Gabrielli (then Petrobras CFO) became involved, forming his own investigation..."

⁴¹⁸ Venina Velosa da Fonseca Deposition, February 16, 2016, Exhibit 7, [PBRCG-P_01776576], "The Head of the Presidential Cabinet, in the use of its tasks, decides to designation the below Internal Investigation Commission is nominated, under the coordination of the first, to investigate indications of irregularities in the management of AB-CR/GC/CI."

⁴¹⁹ Venina Velosa da Fonseca Deposition, February 16, 2016, Exhibit 15, "Today I received from José Roberto the note below, which outlines the history of Cl's improper use of the ZPQS, along with a request for managerial guidance in regards to an decision that needs to be made at his moment. In my estimation, an investigation of the facts should be made under Company's bylaws, but I would like to talk to you before communicating the decision. I arranged with Claudete that I will wait for you tomorrow morning to discuss the matter."

⁴²⁰ Report of the Internal Investigation Committee ("CIA"), DIP GAPRE 123/2008, December 5, 2008, [PBRCG_00771212 at p. 5], "Conclusions a. There was an excess of issuance of ZPQS in AB-CR/GC/CI, with evidence of fractioning payment of services performed and in violation of the MPC principles and the Regulation for Contracting Small Supply Services. b. There is evidence that the AB-CR/GC/CI Manager issued several ZPQS with amounts above the limit of authority, violating OS 01 of 11/16/2006, of the GE of AB-CR."

⁴²¹ Report of the Internal Investigation Committee ("CIA"), DIP GAPRE 123/2008, December 5, 2008, [PBRCG_00771212 at p. 5], "Examine the possibility of applying a disciplinary sanction to the ABCR/ GC/CI Manager for the irregularities detected by the Commission, in breach of the Company's Rules and Procedures and the Limit of Authority for Payments of Small Services."

⁴²² Report of the Internal Investigation Committee ("CIA"), DIP GAPRE 123/2008, December 5, 2008, [PBRCG_00771212 at pp. 5-6], "Recommendations...C. Review, in conjunction with Institutional Corporate Communications, the activities attributed to AB-CR/GC/CI;...F. Intensify the examination of documentation related to contracting processes conducted by AB-CR/GC/CT and by AB-CR/GC/CI, given that several documents were listed and, due to lack of time, were not analyzed."

CONFIDENTIAL

into practice, a Commission must be set up specifically in the area of this Executive Management, to: assess these processes with regard to their compliance with the contracting procedures in force, with regard to the internal authorizations that give effect to these contracts, as well as the associated counterparties/product/services of these contracts – taking statements from all involved and cited – for, subsequently, in light of the resulting conclusions, this Executive Management to indicate the measures to be adopted, thereby protecting the interests of the company, in accordance with item 8 of the present DIP. 423

- 157. Soon thereafter, Ms. Fonseca authorized a second CIA regarding Mr. Morais in accordance with the recommendation of the original GAPRE-authorized CIA.⁴²⁴ The second CIA completed its investigation on March 18, 2009 and concluded that "the irregularities depicted herein represent serious violations which are subject to disciplinary sanctions" and that "the Commission believes that the matter should be submitted to the Company's Senior Management, in order to adopt the pertinent administrative and legal measures, with the support of the LEGAL department."⁴²⁵
- 158. Dr. Henning claims that, despite Ms. Fonseca's decision to terminate Mr. Morais, Mr. Gabrielli reinstated Mr. Morais, "purposefully overriding Ms. Fonseca's correcting action." However, once the decision was made to terminate Mr. Morais, he was never reinstated. Rather, because Mr. Morais was on medical leave at the time, Petrobras could not proceed with his termination until he was back at the office. Dr. Henning also suggests that Mr. Gabrielli "was

⁴²³ Petrobras, DIP AB-CR 16/2009, AB-CR/GC/CI, January 15, 2009, [PBRCG-P_01776564 at p. 2].

⁴²⁴ Internal Commission Report, DIP AB-CR 33/2009, Annex 10 DIP AB-CR 33/2009, January 30, 2009, [PBRGC_01363355]; Report of the Internal Investigation Committee ("CIA"), DIP AB-CR 33/2009, March 18, 2009, [PBRCG_00771058 at p. 3], "the present Commission was created to assess the contracting procedures performed by AB-CR/GC/CI during the period 01/01/2008 to 12/31/2008, with regard to compliance with the contracting procedures and due formalization of contractual instruments, internal authorizations that gave rise to such contracts and their respective counterparts, that is, the actual receipt of the contractual objects and their respective payments."

⁴²⁵ Report of the Internal Investigation Committee ("CIA"), DIP AB-CR 33/2009, March 18, 2009, [PBRCG_00771058 at p. 31], "In the Commission's view, the irregularities depicted herein represent serious violations which are subject to disciplinary sanctions...In view of the reported irregularities, and considering the sum of the involved amounts, the Commission believes that the matter should be submitted to the Company's Senior Management, in order to adopt the pertinent administrative and legal measures, with the support of the LEGAL department."

⁴²⁶ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1.10, "Mr. Gabrielli later reinstated the same employee, thereby, ignoring the internal control deficiencies that led to the 'irregularities' discovered and purposefully overriding Ms. Fonseca's correcting action to terminate the responsible party."

⁴²⁷ PwC, Forensic Services Memo Review of Management's Investigations (CIAs), March 20, 2015, pp. 119-120, [PwCBR_PETRO_000135739 - PwCBR_PETRO_000135890], "In 2009, Geovane's immediate superior, Venina Velosa, the Executive Manager of the Downstream division created a second CIA to handle this task. In this CIA, Geovane de Morais, referred to as Manager of AB-CR/GC/CT (his position at the time), was indicated as responsible for serious faults, and recommended that the high administration of the company, with legal assistance, determine possible disciplinary measures to be taken against him...According to Época Newstory Geovane de Morais entered on medical leave after the conclusion of the CIA, for four and a half years, until 2013, when he was terminated with cause."; Maria das Gracas Silva Foster Deposition, April 28, 2016, 119:5-20, "Q. What is your understanding as to whether or not Mr. Morais remained at Petrobras after October 2011? MR. COOPER: Objection to form. Q. I'm sorry. After 2009. MR. COOPER: Objection. A. As far as I know, he was away on a

aware of a corruption scheme and took steps at least by 2009 to cover up its detection."⁴²⁸ Again, his only evidence is Ms. Fonseca's testimony, in which she states that Mr. Gabrielli's assistant repeatedly questioned Ms. Fonseca about the findings of the second CIA, "saying that the investigation was 'touching on too big a fish."⁴²⁹

159. I have seen no evidence that Mr. Gabrielli was aware of Mr. Morais' improper conduct before it was uncovered in the end of 2008. And Dr. Henning ignores the steps that Mr. Gabrielli took to investigate the behavior, including opening a CIA within days of being informed of the suspected conduct. Indeed, contrary to Ms. Fonseca's testimony, when Mr. Gabrielli was asked if he was aware that Ms. Fonseca wanted to terminate Mr. Morais, Mr. Gabrielli stated, "I was informed at the time that [Mr. Morais] would be terminated and I agree[d] with the procedure." Furthermore, Mr. Gabrielli testified that he never had any direct conversations with Ms. Fonseca regarding Mr. Morais' misconduct.

160. Further, the corruption scheme perpetrated by Mr. Morais was unrelated to the Cartel scheme at issue in this matter. Mr. Morais was found to have violated the procedures for paying small services, which did not require a written contract (nor bidding), by using those procedures (1) excessively, (2) to pay for services in excess of the amounts allowed under the procedures by paying in installments and (3) issuing payments in small amounts in excess of his limits of

medical leave. That was for four years. And one day in 2013, I don't remember exactly when, the company's security guards told me that he was inside the building, and I requested the legal department HR and the officer Mr. Cosenza to fire him if he was under medical leave. THE INTERPRETER: To fire him if he was not under medical leave. So to have him fired if he was not under medical leave."; Nilton Maia Deposition, October 6, 2015, p.12, "What I remember that we had a opinion asking for the immediate resignation of Geovanne. Geovanne was not found in order to accomplish his resignation. We were consulted and we kept our positioning for his dismissal with cause. But we said that it only produced its effect when his leave was finished. It was what was made. And, today, this is the positioning of the legal department."

⁴²⁸ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-10.

⁴²⁹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-9 - 1-10, "Ms. Fonseca also testified that Mr. Gabrielli's assistant repeatedly questioned her about the findings of the independent investigation committee, saying that the investigation was 'touching on too big a fish."

⁴³⁰ Venina Velosa da Fonseca Deposition, February 16, 2016, Exhibit 7, [PBRCG-P_01776576]; "The Head of the Presidential Cabinet, in the use of its tasks, decides to designation the below Internal Investigation Commission is nominated, under the coordination of the first, to investigate indications of irregularities in the management of AB-CR/GC/CI. The Commission will have a deadline of 10 calendar days for their designation to present a conclusive report."

⁴³¹ Jose Sergio Gabrielli Deposition, April 20, 2016, 89:13-24, "Q. Where in this report does it indicate that Mr. Morais was terminated from his employment?...A. According to Petrobras procedures, the CIA recommends punishment. The immediate boss would decide the kind of punishment. Q. Who was the immediate boss? A. Venina Velosa. Q. Did she want to terminate Mr. Morais? A. I believe she did because I was informed at the time that he would be terminated and I agree with the procedure."

⁴³² Jose Sergio Gabrielli Deposition, April 20, 2016, 84:3-13, "Q. Did you have any conversations – strike that. New question. Do you know a woman named Ms. Venina Velosa Fonseca? A. Yes. Q. And you knew her in 2009, is that right? A. She was Geovane's boss. Q. Did you have any conversations with her about Mr. Morais' misconduct? A. Not directly. Q. What do you mean by not directly? A. Not one on one."

authority. Because his improper conduct was unrelated to bidding, it is very unlikely to have uncovered a cartel engaged in bid collusion. Furthermore, as a manager in the Institutional Communications area, Mr. Morais was responsible for coordinating sponsoring events, not in contracting for refinery projects. Therefore none of the services he was contracting for would have involved any of the construction companies at issue in the Cartel scheme.

- 161. Finally, Dr. Henning cites testimony from Ms. Fonseca in which she claimed that she:
 ...approached Ms. Foster with these issues in early April 2009, after being asked to follow certain procedures that were not consistent with Petrobras's policies.
 Ms. Foster had previous knowledge of these irregularities as a result of discussions held in the Board of Executive Officers meetings. Rather than offer assistance or guidance in exposing the cover up or performing further investigation, Ms. Foster simply suggested that Ms. Fonesca [sic] "look for another place to work." 435
- 162. But Dr. Henning fails to take into consideration the totality of Ms. Fonseca's testimony or Ms. Foster's testimony about their meeting. Ms. Foster testified that at the time, she knew of the issues concerning Mr. Morais because, as a result of the two CIAs, word had spread among Petrobras employees about his conduct.⁴³⁶ And, she had understood that the issue was resolved because the decision had been made to terminate Mr. Morais. In fact the document that Ms. Fonseca provided to Ms. Foster confirmed that the decision to fire Mr. Morais had been made.⁴³⁷

⁴³³ Report of the Internal Investigation Committee ("CIA"), DIP AB-CR 33/2009, March 18, 2009, [PBRCG_00771058 at p. 30], "In light of what has been observed during the course of this task, it is possible to affirm that there were numerous flaws in the payment procedures for services performed by the AB-CR/GC/CI during the year 2008. Namely: [1]Excessive use of ZPQS, with an amount of issuances that demonstrate that the guideline that determines the use of this modality of payment only for non-routine cases was not observed; [2]Inobservance of the limit of authority in more than 1,200 ZPQS issued; [3] Fractioning of payments for services in order to enable payments that would be beyond the limits of authority of the of AB-CR/GC/CI Manager"

⁴³⁴ Report of the Internal Investigation Committee ("CIA"), DIP AB-CR 33/2009, March 18, 2009, [PBRCG_00771058 at p. 22], "In his attached testimony to the Commission, Mr. Geovane presents the reasons for taking the initiative to perform events without the approval of his superiors, as per the following excerpt: 'Some sponsorships are in the interest of society, as for example Marching for Peace, indigenous, etc., in the interest of social movements, reinforcing public policies, which are advocated by the Ethos Institute and the PNQ [National Quality Prize].' He subsequently reiterates his stand:...'the role of communications is to work on the image; If you bureaucratize, you don't communicate.'"

⁴³⁵ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-10.

⁴³⁶ Maria das Gracas Silva Foster Deposition, April 28, 2016, 114: 19-23, "Q.What did Ms. Fonseca tell you then? A. She told me that everybody knew. Everyone knew that Geovane had paid a lot of different services much above his level of authority."; 234:15-235:7, "Q. And my question to you is do you know how everyone already knew this information? A. Because in the building that we work, that building downtown actually, not that we work, because I no longer work there, that they work, when I have two commissions that happened right after, two CIAs, and the result requests the dismissal of an employee, this will almost never not spread around the building and the company. Q. Did you personally know about Geovane de Morais's alleged misconduct before Petrobras completed its investigations that the two CIAs carried out?A. No, I didn't know even because I was head of gas and energy."

⁴³⁷ Venina Velosa da Fonseca Deposition, March 9, 2016, 277:3-22, "Q. Okay. Let's go to this document here. Do you recognize what this document is? A. Yes. Q. Did you prepare the document? A. Yes. Q. Can you explain what it is? A. This document

(2) RNEST Issues

163. Based on Ms. Fonseca's testimony, Dr. Henning also discussed certain "red flags" related to the RNEST refinery. Specifically, according to Dr. Henning, Ms. Fonseca testified that (1) she was pressured to change numbers so that the RNEST refinery did not reflect a negative investment value, and (2) that Petrobras Executives had knowledge of overbillings at RNEST. 438 To the extent that Mr. Costa did, in fact, pressure Ms. Fonseca to change RNEST analyses to disguise true losses, this only indicates Mr. Costa's involvement in the Illicit Payment Schemes, and not a broader knowledge or involvement by Petrobras Leadership. I am unaware of evidence suggesting that anyone, other than Mr. Costa and his assistant, exerted pressure on Ms. Fonseca to modify figures related to the RNEST refinery project. 439 With respect to Petrobras Executives' knowledge of overbillings, Dr. Henning provides an example in which "the Board of Executive Officers approved the signing of a vendor contract that was negotiated to be 272% higher than the internal budget had allotted."440 Dr. Henning, however, misrepresents the Petrobras controls related to the budgeting process. The specific control used by Petrobras requires that a final bid on a contract fall between 15% below and 20% above the *internal estimate* (not the budget) for that contract.⁴⁴¹ The internal estimate is

portrays the full history of the issue that occurred in the communications division. It mentions the key events. It demonstrates the termination of the employee on that date, Geovane, and it states that we are available to provide assistance to any measures that would be taken after the creation of this document. Q. Who was the document prepared for? A. It was prepared to the auditing division. Q. Did you also provide a copy of this document to Ms. Graca Foster? A. Correct."

⁴³⁸ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-11, "Ms. Fonseca testified that Petrobras' Board of Executive Officers clearly had knowledge of the overbillings with regard to construction projects, such as RNEST. She contributed to the preparation of certain presentations made to both the Board of Executive Officers and to the Board of Directors, noting that the overbillings were not identified specifically as such, but there was always a portion of the budget and project costs that could not be explained."; p. 1-11 – 1-12, "Ms. Fonseca was often pressured to change her numbers so that the RNEST refinery did not reflect a negative investment value because the members of the Board of Executive Officers only wanted her to convey that the amount was within the budget."

⁴³⁹ Venina Velosa da Fonseca Deposition, February 16, 2016, 115:5-21, "Q. Ms. da Fonseca, I just want to go back to the time that you testified you were pressured by Petrobras to change or remove numbers that did not show a negative viability with respect to the RNEST refinery. Can you provide examples of specific conversations where this pressure was exerted on you?...A. When this happened, in my office, this requirement coming from the executive board cabinet, Francisco Pais was assistant of Paulo Roberto Costa. He came with documents that had been already submitted to the executive board. I believe the same documents mentioned by the secretary on his e-mail. They had changes in them and they were edited and completely different with changes proposed.; 117:7-11. "Q. Can you describe the other instances when he did that? A. Every time there is a document that needed to be submitted to the executive board, I would suffer pressure by [Costa and Pais]."

⁴⁴⁰ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-30.

⁴⁴¹ Gerson Luiz Gonçalves Deposition, February 19, 2016, Ex. 2 (translation), p. 5 "JUDGE: The court has one clarification. Many things are already clarified, I believe in the criminal complaint, but I think that it is important to take advantage of your presence to put this here in a very clear way. Does Petrobras make an estimate of prices before contracting for a work? Is that correct? GONCALVES: Yes. Inside the Engineering Department there is a price estimation area. JUDGE: And when the bids are solicited, according to the criminal complaint, there is an acceptable price percentage above this estimate. Is that right? GONCALVES: There is. In relation to the estimates, there is a margin of tolerance. I think it is 20% under and 15% above. If the

calculated by the Services Department, which is responsible for contracting, based on the specifications of the specific contract.⁴⁴²

166. While the final contract price was 272% higher than what Ms. Fonseca had budgeted, in an earlier phase of the project,⁴⁴³ it was 9.8% *lower* than Petrobras's internal estimate for the specific contract which had been updated for several reasons.⁴⁴⁴ An earlier budget was prepared in 2006, during a prior phase of the project and did not anticipate a variety of factors that resulted in increased costs for the RNEST project by 2009.⁴⁴⁵ Therefore, the Downstream area reexamined their budget and identified factors that their budget had not taken into account. For example, there were increases in cost that resulted from the change in US Dollar/ Brazilian Real exchange rate, a miscalibration of the indices used to make the 2006 budget, a change in market conditions within Brazil, costs Petrobras had to incur to improve local infrastructure to proceed with construction, and changes in scope of the project.⁴⁴⁶ The budget was revised and the Board

price is within this range, the bidding process continues. If this range is extrapolated, a new process is conducted. The original process is canceled. In the RNEST case there was a 'rebid', as they call it."

⁴⁴² Paulo Roberto Costa Deposition, October 7, 2014, 4:21-30, "Yes, usually, as I said, the BDI is ranges from 10% to 20%, and usually, an average of 3% of political adjustment. Petrobras, at the same time, the engineering area, which conducts the bidding processes of Petrobras, let's say, all the bidding processes of the Downstream area of large scale are conducted by another department, that was not the Downstream Department, it was the Service Department, which provides this service for the Downstream area, as well as for the exploration and production area, and, on occasion, for thhe international area and the natural gas area. So there is a, a department that conducts this activity. What does it do in this activity? It takes the Petrobras records, choses the companies that will participate in the bidding process, conducts the bidding, and then a bidding commission in appointed or the coordination of the bidding commission is performed by this department, so it conducts the bidding."

⁴⁴³ Venina Velosa da Fonseca Deposition, February 16, 2016, Exhibit 12, "Bidding: Price offered In service and materiais bidding: R\$ 966.103 million, at an exchange rate of US\$ 1 = R\$ 1.63 (08/15/08), the equivalent of US\$ 592.7 million, which corresponds to a 272.7% of the budgeted price on 11/30/2006."

⁴⁴⁴ DIP Engineering 000696/2008, [PBRG_01226966-71], p. 4.; "Taking into consideration the Risk Analysis concept, a methodology that illustrated the determination of the range of acceptability of the ALUSA Engenharia Ltda. proposal, the Committee considered that the amount of this proposal (R\$ 971,000,213.00) is in the interest of Petrobras, and fits in the range of the Petrobras estimate, which varied from a minimum of R\$ 919,973,030.55 (nine hundred nineteen million nine hundred seventy-three thousand thirty reais and fifty-five centavos) to a maximum of R\$ 1,285,871,394.97 (one billion two hundred eighty-five million eight hundred seventy-one thousand three hundred ninety-four reais and ninety-seven centavos), with an average of R\$ 1,076,786,615.30 (one billion seventy-six million seven hundred eighty-six thousand six hundred fifteen reais and thirty centavos), so that it is 9.82% below the average estimated amount for providing the services.

⁴⁴⁵ Notice of Decision of Executive Directorate, DE Minutes 4.786 item 30, of 11/25/2009 – Pauta no. 1236, [PBRCG_01187023-137], p. 2, "On 2006, the start of the phase of FEL-3 of the project was started, with revised investment of US\$ 4,058 billion and adaptations to the project, changing it from one to two coking units and two HDT parks, in order to correct unviable technical limitation (oversized dimensions on account of the load). In this condition, its VPL was estimates at US \$1.093 billion.... On 7/16/2009, the AB-CR/PP presented an update in the results of the project to the Executive Directorate, which demonstrates that, for the scenario in with the estimated investment totaled US\$ 13.238 billion, considering the ratification of the partnership with PDVSA and ignoring the concurrent effects of the PREMIUM refineries, the VLP (updated with the database of January 2009) with a TMA of 8.7% a.a. was: a) US\$ 3.06 billion negative for Supply's robustness scenario, and; b) US\$ 2.33 billion negative for the mentioned scenario."

⁴⁴⁶ PBRCG_00334241-48; PBRCG_01788658 [see PBRCG-P_01344576-000011 for translation]; Notice of Decision of Executive Directorate, DE Minutes 4.786 item 30, of 11/25/2009 – Pauta no. 1236, [PBRCG_01187023-137]

was informed of the changes.447

167. I understand that Dr. Verleger, in his report dated May 27, 2016, has analyzed the increases in cost at the RNEST refinery and provided his opinion as to why those increases would not have presented a red flag to senior management of fraud in the bidding and construction process.

(3) Allegations by Mr. Sa of a Cartel in 2009 and Petrobras's Alleged Retaliation

168. Dr. Henning suggests that in mid-2009, while Ms. Fonseca and Mr. Fernando Sa, a colleague from Petrobras's legal department, were addressing RNEST contract amendments, "Mr. Sa became suspicious about the existence of a cartel." According to Ms. Fonseca, Mr. Sa presented his findings to the head of Petrobras's legal department and requested an investigation of the cartel-related activities. Rather than investigating the cartel, Ms. Fonseca claims that Petrobras investigated Mr. Sa and subsequently demoted him, knowing that by demoting Mr. Sa, Ms. Fonseca would lose her "main point of support within the company." 450

169. Dr. Henning either did not review or has ignored relevant documents and other testimony related to this allegation. Fernando Sa was an in house attorney at Petrobras, working under the direction of Nilton Maia, the Legal Department Executive Manager.⁴⁵¹ In 2009, Mr. Sa raised certain concerns related to Petrobras activity with the Brazilian Industrial Engineering

⁴⁴⁷ PBRCG_00334241-48; PBRCG_01788658 [see PBRCG-P_01344576-000011 for translation]; Notice of Decision of Executive Directorate, DE Minutes 4.786 item 30, of 11/25/2009 – Pauta no. 1236, [PBRCG_01187023-137]

⁴⁴⁸ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-12, "In mid-2009, Ms. Fonseca was working with her colleague from Petrobras' legal department, Fernando Sa, to address requested contract amendments that would increase the price to Petrobras by 272 percent. As a result of these changes, Mr. Sa became suspicious about the existence of a cartel, at which time he reviewed certain documents."

⁴⁴⁹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-12, citing Fonseca testimony "...Fernando Sa filed a complaint regarding the cartel and instead of the officer at that time Nilton Maia, his superior [and head of Petrobras's legal department], request an investigation of the cartel, they requested an investigation of Fernando. After this investigation, he had no access to the report but he was demoted...They knew that by demoting Fernando I would lose my main point of support within the company..."

⁴⁵⁰ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-12.

⁴⁵¹ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145],p. 2, "01. By decision of the LEGAL Department Executive Manager, Dr. Nilton Antonio da Almeida Maia, LEGAL Internal Petrobras Document No. 137/2009 of July 10, 2009 (Wordflow File No. 09154B4) (Exhibit No. 01 attached), an Internal Investigation Committee was instituted, made up of the undersigned employees...investigating any possible irregularities reported by the former Supply Department Legal Affairs Manager, Dr. Fernando de Castro Sa, referred to hereinafter as complainant, in a dossier consisting of 2 (two) volumes (Exhibit No. 02 attached), which he submitted to the Legal Executive Manager, as well as submitting a final report."

Association, *Associacao Brasileira de Engenharia Industrial* ("ABEMI"). Specifically, in a written report:

- Mr. Sa raised questions about whether the decision-making process employed for the analysis of contract clauses recommended by ABEMI complied with the rules and regulations regarding the legal process; and⁴⁵²
- Mr. Sa presented seven specific cases in which he disagreed with legal opinions adopted by Petrobras's legal department.⁴⁵³
- 170. Further, while not included in his official complaint, Mr. Sa mentioned his concern that there was undue interference by ABEMI in contractual matters that were analyzed and reviewed by Petrobras's legal department.⁴⁵⁴
- 171. Contrary to Ms. Fonseca's claims that Petrobras did not investigate Mr. Sa's allegations, Mr. Maia instituted a CIA on July 10, 2009 to investigate Mr. Sa's concerns. The CIA reviewed a 450-page dossier, prepared by Mr. Sa, containing documents related to his allegations. The CIA also took deposition testimony from ten Petrobras employees, including "from several of the persons indicated by [Mr. Sa] in the second volume of his dossier, as 'witnesses as to the accuracy of its content."

⁴⁵² Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 3, "05. In the first volume the complainant, in summary, stated that "LEGAL/JA did not agree with the decision-making process employed for the analysis of contract clauses, including through recommendations by…because it did not comply with rules and regulations regarding the legal process (PE and PG) that he cited…"

⁴⁵³ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 3, "06. In the second volume, he presented seven specific cases ("amendment to the standard contract," "adoption of ABEMI schedule of indicators," "cash flow," "amendment of quantities," "prior indemnification," "tax issues," and "payment for services not performed"), in which he stated his disagreement with the legal positions adopted in LEGAL/JSERV /ENG opinions."

⁴⁵⁴ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 3, "[I]n the Committee's judgment, the complainant expressly mentioned (see the "ABEMI" Chapter in Volume 1 -"ABEMI" -in the dossier) and it is also possible to infer from the inquires that he made, that there was undue interference by ABEMI in contractual matters analyzed and reviewed by LEGAL, and specifically the Contract Law Committee and LEGAL/JSERV/ENG, justifying this accusation with disagreements of a legal nature that he presented. However, that accusation was not expressed in the dossier as an objective charge of irregularity, which is to say, a civilly or criminally illegal act that the complainant reported, as well as the respective perpetrators of same."

⁴⁵⁵ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 2, "After a complete reading of the dossier, and in order to better perform its work, the Committee, in conjunction with the LEGAL Department Executive Manager, established boundaries and limits for the subject of the investigation to be performed....The dossier received by the Committee consisted of 2 (two) volumes, the first entitled "ABEMI," and containing 232 (two hundred thirty-two) pages, and the second entitled "SPECIFIC CASES," which contained 219 (two hundred nineteen) pages."

⁴⁵⁶ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 2, "[I]t [The Committee] received statements from 10 (ten) Petrobras employees, it performed an examination of the documents and facts submitted and lastly, it prepared and approved this report, which presents and explains the work and analyses performed and, at the end, its conclusions. "; p. 4, "12.The Committee then established as a methodology and schedule of work, within exact limitations on its work and actions and on the basis of the documents contained in the dossier, to obtain information regarding

- 172. Dr. Henning even fails to address that Ms. Fonseca testified that she did not recall whether Mr. Sa used the word "cartel."
 - Q. And you remember [Mr. Sa] using the word "cartel," not "Abemi"? A. I don't remember because to me it meant the same thing, so right now I wouldn't be able to remember.

. . .

I am saying that he could have used the word "Abemi" or "cartel." What I am saying is these two words were not different from one from the other. Within the context they meant the same thing. I think what is most important is what happened later, which is he did investigate and he was able to provide evidence for the cartel's existence back in 2009.⁴⁵⁷

173. Further, Ms. Fonseca's characterization of ABEMI as a "cartel" is not supported by the discussion in the CIA report. For instance, the CIA also found that "Petrobras's practice of conducting discussions of matters of interest to it with organizations that represent business segments is not new."⁴⁵⁸ In fact, one deponent testified that the discussion of technical contractual matters with ABEMI may have positive results for the Company:

[T]he general Manager of AB-CR/RNE, Wilson Guilherme Ramalho da Silva, in his deposition...emphasized that 'because Petrobras is part of the domestic market, it cannot be seen how Petrobras could not have relationships with that market, particularly to promote competition, in order to obtain proposals that are more advantageous for Petrobras, and that discussion must take place in the largest possible forum which makes possible to reach the entire vendor market...⁴⁵⁹

174. In addition, the CIA analyzed Petrobras's legal opinions that addressed "ABEMI Notices" (defined as "the results of discussions held and conclusions reached at the Petrobras/Engineering/ABEMI/ABCE Work Group and its subgroups"). 460 After analyzing those

ABEMI/PETROBRAS/ENGINEERING/LEGAL relationships, and the origin and evolution of same, and in parallel take formal depositions from several attorneys and managers from LEGAL who signed the opinions that were questioned and/or who, by any means, had contacts with ABEMI, as well as the former and the current Coordinator of the Contract Law Committee, and also take formal depositions from several of the persons indicated by the complainant in the second volume of his dossier, as 'witnesses as to the accuracy of its content.'

⁴⁵⁷ Venina Velosa da Fonseca Deposition, March 9, 2016, 307:12 – 308:4.

⁴⁵⁸ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 10, "22. Petrobras' practice of conducting discussions of matters of interest to it with organizations that represent business segments is not new, it also extends to its work abroad, and it is perceived to be well accepted in Company management circles." ⁴⁵⁹ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 10.

⁴⁶⁰ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 15, "First of all, it is necessary to make the clarification that, even though the dossier always refers to those notices as 'ABEMI notices', these documents are in actual fact joint PETROBRAS/ ABEMI/ ABCE documents, the results of discussions held and conclusions reached at the PETROBRAS/ENGINEERING/ ABEMI/ ABCE Work Group and its subgroups. In other words, the notices express the position of the three organizations in regard to certain matters."

legal opinions, the CIA concluded that the opinions were based on "legal provisions, principles and precedents" not on the conclusions of the ABEMI Notices.⁴⁶¹

175. The CIA further found that, beginning in early 2007, "because a more rapid means for addressing Work Group issues that have legal implications was deemed necessary, ENGINEERING invited the Manager of LEGAL/JServ" to a meeting. 462 The Work Group created a Legal Work Subgroup. 463 The CIA Report found that the Work Group and Legal Work Subgroup generated viable recommendations for Petrobras's contract procedures and that "only a small portion was approved, which actually resulted in improvements and did not have a negative impact on Petrobras."464 The CIA recommended that the Work Group and the Legal Work Group should be formalized, because "as [Mr. Sa] rightly emphasized in his deposition, it involves not only advice to the client ENGINEERING but the representation of 'LEGAL per se' at an industry organization."465

176. The CIA also investigated Mr. Sa's concern "with the competition aspect due to

⁴⁶¹ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 17, "39. In addition to the statements quoted above, the analysis of the opinions attached to the dossier that cite any PETROBRAS/ ABEMI/ABCE Notices reveals that the legal grounds supporting the opinions and judgments set forth in those opinions specifically and precisely took into account legal provisions, principles and precedents, not the Notices cited."

⁴⁶² Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 10, "However, because a more rapid means for addressing Work Group issues that have legal implications was deemed necessary, ENGINEERING invited the Manager of LEGAL/JSERV at the time, Dr. Guilherme Rodrigues Dias, to its meeting on February 7, 2007 (Exhibit No. 05C attached), on which occasion he gave a presentation on the structure of LEGAL, and it was decided to create a Legal Work Subgroup (SGT Juridico) with the participation of ENGINEERING/LEGAL/ ABEMI and ABCE."

⁴⁶³ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 10, "However, because a more rapid means for addressing Work Group issues that have legal implications was deemed necessary, ENGINEERING invited the Manager of LEGAL/JSERV at the time, Dr. Guilherme Rodrigues Dias, to its meeting on February 7, 2007 (Exhibit No. 05C attached), on which occasion he gave a presentation on the structure of LEGAL, and it was decided to create a Legal Work Subgroup (SGT Juridico) with the participation of ENGINEERING/LEGAL/ ABEMI and ABCE."

⁴⁶⁴ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145],p. 15, "31. This information reveals that the discussions at the ENGINEERING/PETROBRAS/ABEMI/ABCE Work Group and its Legal Work Subgroup could generate viable recommendations for Company contract procedures, but also reveals the rigorous analysis performed at the Contract Law Committee, such that only a small portion was approved, which actually resulted in improvements and did not have a negative impact on Petrobras."

⁴⁶⁵ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145],p. 18, "42. That being the case, it is necessary to conclude that the participation of LEGAL representatives in the Legal Work Subgroup of the ENGINEERING /PETROBRAS/ ABEMI/ ABCE Work Group must be formalized by the Executive Manager because, as the complainant rightly emphasized in his deposition, it involves not only advice to the client ENGINEERING, but the representation of 'LEGAL per se'" at an industry organization."

The CIA also recommended that LEGAL executive manager should issue guidance affirming the non-binding nature of the PETROBRAS/ABEMI/ABCE notices. Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 18, , "42. Likewise, and to remove any doubts that any Company attorney has or should come to have, it is also advisable for the LEGAL Executive Manager to issue guidance affirming the nonbinding nature of PETROBRAS/ABEMI/ABCE Notices in establishing legal positions regarding any given matter."

PETROBRAS'S status as an ABEMI participant (member)."466 Based on testimony of several deponents who stated that the Work Group did not create a competitive advantage for ABEMI member companies, the CIA concluded that the concern expressed by Mr. Sa "cannot be anything but a subjective concern, given that no concrete facts were submitted that prove competitive advantage."467

177. Ultimately, the CIA concluded that:

- the recommendations provided by ABEMI for the revision of standard contract wording were properly handled within Petrobras;
- there was no evidence of ABEMI interference in the activities of Petrobras's legal department;
- "illegal or wrongful acts" and "specific damages to Petrobras" were not "indicated or identified in the items questioned in the dossier."468

178. Ms. Fonseca claims that "after they found out [about Mr. Sa's allegations of a cartel], they wanted to terminate Fernando [Sa] and they created this commission in order to try and do so." The ABEMI CIA appears to be unrelated to any allegations of wrongdoing by Mr. Sa. Further, Dr. Henning does not appear to have considered evidence that the removal of Mr. Sa's managerial title⁴⁷⁰ was unrelated to complaints about a "cartel." In fact, Mr. Sa was demoted for

⁴⁶⁶ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 18, "44. The complainant also revealed in his deposition a concern 'with the competition aspect due to PETROBRAS' status as an ABEMI participant (member), independently of issues regarding the principle of disclosure *erga omnes* in contracts adopted by PETROBRAS and its subsidiaries, in light of the Regulation approved by Decree 2, 7 45."

⁴⁶⁷ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 20, "46. In view of those statements, the concern expressed by the complainant in regard to this issue at the present time cannot be anything but a subjective concern, given that no concrete facts were submitted that prove competitive advantage."

⁴⁶⁸ Report of the Internal Investigation Committee ("CIA"), DIP LEGAL 137/2009, July 10, 2009, [PBRCG_01393116-145], p. 24, "[T]]he Committee makes the following conclusions and recommendations: a) the recommendations provided by ABEMI for the revision of standard contract wording were properly handled within LEGAL, and specifically by the Contract Law Committee; ... c) there is no evidence or actual proof of ABEMI interference in the activities of Legal; d) illegal or wrongful acts were not indicated or identified in the items questioned in the dossier, nor were specific damages to Petrobras resulting from same; e) LEGAL should recommend to ENGINEERING the proper formalization of the PETROBRAS/ ABEMI/ ABCE Work Group, and advise it in that regard."

⁴⁶⁹ Venina Velosa da Fonseca Deposition, March 9, 2016, 3313:15-314:4, "A. No, this is information that he gathered to provide evidence of the cartel's existence that was provided to the executive manager. They created a commission to investigate Fernando Sa and the commission's report was not provided to him when he was suspended. He resorted to the Supreme Court in order to have access to this report and the final report deleted testimony of key individuals. That I hadn't mentioned before. Q. So what is the basis for your belief that Mr. Sa was investigated? A. After they found out, they wanted to terminate Fernando and they created this commission in order to try and do so."

⁴⁷⁰ Nilton Antonio de Almeida Maia Deposition, April 14, 2016, 193:14-21, "Q. Did Mr. Fernando Sa, was he reassigned shortly after raising his concerns to you about Abemi? A. No. Q. Was he transferred at any point in time?...A. He was removed or taken away from his managerial position by me."

serious "behavioral issues," including failure to "incorporate himself with the internal rules of the legal department. 471,472

(4) Alleged Retaliation Against Ms. Fonseca

179. In addition to alleged retaliation against Mr. Sa, Dr. Henning claims that Petrobras also retaliated against Ms. Fonseca for being a whistleblower. Specifically, Dr. Henning claims that Petrobras's Executive Board "retaliate[d] against Ms. Fonseca by demoting her from the executive manager level of the Company in November 2009 and relocating her to Singapore." 180. However, Dr. Henning has not addressed documents and deposition testimony that suggest that Ms. Fonseca's move to Singapore was not a demotion, nor due to retaliation. For example, contemporaneous evidence shows that Ms. Fonseca was exploring the possibility of going to Singapore two months before her transfer was considered by the Executive Board. In early September, a Petrobras colleague in Singapore, Ms. Odilia Maria Cavalcanti de Macedo Dauzecker, helped her to identify classes she could take in Singapore and by the end of September she was applying to a business school program in Singapore.

⁴⁷¹ Nilton Antonio de Almeida Maia Deposition, June 10, 2015, p.98, "Mr. NILTON MAIA - Fernando was moved away because of behavioral issues. Fernando did not incorporate himself with the internal rules of the legal department. The legal department has several for its uniformity, and Fernando was not satisfied with these rules. For this reason he was moved away."; p. 120, "MAYAN Mr. NILTON- Excellency, Fernando is no longer in legal. No, no I cannot express myself about the company's procedure in relation to his behavior, but, as for legal, he was evaluated on all these issues – and there were serious issues that happened, behavioral. Not only were there deviations; there were....there were... lack of guidelines, lack of clear respect in relation to his peers – this is what was adopted. Now, as to the company's attitude in relation to what Fernando is saying, I do not know, I cannot say."

⁴⁷² Nilton Antonio de Almeida Maia Deposition, June 10, 2015, p. 121, "MAYAN Mr. NILTON – He was and he was dismissed, Excellency, on behalf of clear behaviors. And he was dismissed before making any sort of complaint He is making these complaints now. The complaint that he made [a]t the time, Excellency—if you allow me to conclude—was determined. An internal commission was made. This commission prescribed a report, this commission heard everyone. It even hear Fernando himself. This Commission finished its report. This was clear. What he brought us at the time was determined, made a report, consisted a Commission, and concluded. Fernando was dismissed not because of that, and yes, because for behavioral issues."

⁴⁷³ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-12, citing to Fonseca testimony "In pressuring her, the Petrobras Board of Executive Officers again subordinated the best interests of the Company, ultimately retaliating against Ms. Fonseca by demoting her from the executive manager level of the Company in November 2009 and relocating her to Singapore."

⁴⁷⁴ Email from Odilia Dauzacker (Petrobras Singapore) to Venina Fonseca (Petrobras Brazil), September 3, 2009, [PBRCG_01227122], "Venina, For English courses, I looked into the alternatives and the best options are either Berlitz or the British Council. Both offer full-time courses if you are interested. Berlitz has a full-time, total immersion course that goes for 7½ hours of individual classes per day and varies from 2 to 6 weeks long. It should be a good one for becoming fluent. I'm not entirely sure but I understood when talking to you on the phone that you'd prefer a long-term course that would start in September. So I tried to find short courses for the March to September period but I still have not found anything yet. Really short courses, like a week long, are not yet calendared for next year but based on this year's calendars there are a lot of alternatives both in the area of administration and in trading and risk. Medium-length courses must be of a higher level and are all at night since they are geared toward working people. I don't know if that is of interest. What are the alternatives that you saw for the long-term courses?"

22, 2009 email from Ms. Dauzecker to Ms. Fonseca titled "Cost of Living" stated that Ms. Dauzecker did a quick calculation of Ms. Fonseca's family's expenses in Singapore, outlining the major expenses, including her children's schooling, which "is paid by semester and Petrobras pays 90%." She said "she has the impression that the general cost of living [in Singapore] was lower than [in Brazil] (except for housing and school [for the kids], but Petrobras pays." Once her transfer was approved, Ms. Fonseca wrote an email to her new supervisor thanking him for arranging her transfer and stating that "my whole family looks upon 2010 with great expectations."

b. SBM

pays for it)."

181. SBM, domiciled in the Netherlands, provides floating platforms to the offshore energy industry. In April 2012, SBM announced that it had initiated an internal investigation into alleged improper sales practices involving third parties. On February 13, 2014, *Valor Economico* published an article alleging that SBM, through its agent Julio Faerman, paid bribes

general the cost of living here is lower than over there (leaving aside housing and the school, which are expensive, but Petrobras

⁴⁷⁵ INSEAD MBA Email dated September 29, 2009, [PBRCG_01226949], "Subject RE: MBA candidate...Dear Sirs, I'm writing on the behalf of Venina Velosa da Fonsecaa Senior Executive of Downstream Corporate Affairs with Petrobras, Brazil. Currently, she is in charge of around 700 employees, organized in three General Managements and fifty Management areas. ... She intends to apply for the September run of your highly renowned MBA program. She has finished filling out the admission form and was ready to submit it when she realized she wasn't able to because she did not have the GMAT score."

⁴⁷⁶ Letter from Odilia Dauzacker (Petrobras Singapore) to Venina Fonseca (Petrobras Brazil), September 22, 2009. [PBRCG_01227124] "I did a brief survey of our expenses here and the situation is basically as follows: General household expenses such as grocery shopping, the maid, fuel, lunch at work, etc. comes to about SGD 8,000 per month. When you include possible trips around the neighborhood and few extra little purchases, it might come to SGD 10,000 some months. The girls' school is paid per semester and Petrobras pays for 90% of it, so that leaves about SGD 2,000 per child per semester that we pay. So, for the months when the school bill is paid, the expenditure is about SGD 12,000 per month. I am under the impression that in

⁴⁷⁷ Email from Venina Fonseca (Petrobras) to Jose Raimundo Pereira Brandao (Petrobras), September 11, 2009, [PBRCG_01227120], "First, I'd like to thank you for everything you do and have done for me in this post-Executive Management phase. I hope to one day be able to return the attention that you have given me. I know that you personally dealt with the matter. Without your help I would not have been able to turn lemons into lemonade! I want you to know that you can count on me as your 'faithful squire' and that my whole family looks upon 2010 with great expectations. No matter how hard I try I will never be able to put into words what I now feel. Those were many years of dedication, which thanks to you, did not end in..."

^{478 &}quot;Company Profile," SBM Offshore, available at http://www.sbmoffshore.com/who-we-are/company-profile/.

⁴⁷⁹ "SBM Offshore creates new Management Board position for Governance and Compliance," SBM Offshore Press Release, April 10, 2012 available at http://www.sbmoffshore.com/wp-content/uploads/2011/12/SBM-Offshore-creates-new-management-Board-position-for-governance-and-Compliance.pdf. "As part of this review, the Company has recently become aware of certain sales practices involving third parties and which may have been improper. Outside counsel and forensic accountants, reporting to both the Management and Supervisory Boards, have been engaged to investigate these practices thoroughly. The Company has also taken the necessary steps to terminate any such practices. SBM Offshore has disclosed its internal investigation to appropriate authorities and is taking remedial action to enhance its compliance programme."

to Petrobras employees to secure construction and rental contracts with Petrobras.⁴⁸⁰ That day, Petrobras initiated a CIA to investigate the accusations.⁴⁸¹ Petrobras's investigation concluded on March 29, 2014, and found that based on the work it had conducted so far, "no facts or documents evidencing any payment of bribes to employees [at] Petrobras were found."⁴⁸² SBM subsequently learned, and informed Petrobras on May 23, 2014, that Holland's Openbaar Misiterie had recently obtained evidence of bribes to a Petrobras employee.⁴⁸³ Plaintiffs' Experts' discussion of SBM is flawed for several reasons.

- 182. First, Dr. Henning discusses a May 2014 article in *O Estado Del S. Paulo* which alleged that Petrobras knew about suspicions of bribery since 2012 and that "Petrobras's President, Ms. Foster, waited almost a year and a half after receiving warnings from SBM to start an internal investigation." Dr. Henning, however, omits discussion of evidence that (1) Petrobras repeatedly inquired about the status of the SBM investigation, including whether any bribes had been identified involving Petrobras, and (2) Company executives did not receive information regarding bribes to any Petrobras employee until after the completion of its CIA regarding the matter.
- 183. For example, in a July 10, 2012 email from Mr. Chabas, SBM CEO, to Mr. Formigili, Chief Exploration & Production Officer, regarding a meeting held the previous month, Mr. Chabas stated:

⁴⁸⁰ "The SBM bribery investigation also includes Petrobras," Valor Economico, February 13, 2014, "According to the complaint, the payments were made through an SBM business representative in Brazil, Mr. Julio Faerman as well as companies that were related to him, among which were Faercom Energia Ltd., JF Oildrive Consultoria em Energia Petroleo, Bienfaire, Jandell, Journey Advisors and Hades Production Inc. Of these 'commissions' (always mentioned in quotations) of 3% payment to Julio Faerman (or JF), 1% was destined to him and his companies and the other '2% to Petrobras Employees'.

⁴⁸¹ Internal Commission of Inquiry ("CIA"), DIP DE&P 17/2014, February 13, 2014.

⁴⁸² Internal Commission of Inquiry ("CIA"), DIP DE&P 17/2014, February 13, 2014, "CONCLUSIONS Based on the work conducted so far and restricted to its regulatory competences, the Commission concluded that no facts or documents evidencing any payment of bribes to employees PETROBRAS were found."

⁴⁸³ Letter from Pedro Aramis de Lima Arruda (Petrobras) to Bruno Chabas (SBM), May 27, 2014, [PBRCG_01770354 "We reference the SBM Letter dated May 27, 2014 ("SBM Letter") and appreciate the information you advanced to us by telephone the afternoon of May 23, 2014. As you know, the President Graça Foster attended your phone call in my presence and two other people: the Assistant to the President Jorge Salles and the Executive manager of the Legal Department Nilton Maia, al[I] the member of the Internal Verification Commission related to SBM, with the exception of the President. On that occasion, you informed us that SBM had come to know new facts that gave an account of Openbaar Ministerie of Holland finding the registration of payment of substantial values from a Swiss account held by Mr. Julio Faerman, to a Petrobras employee, without, however, mentioning who the employee was. You also informed us that this fact was already known to a Brazilian Authority, without, as well, mentioning exactly which one."

⁴⁸⁴ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-37, "In addition, this May 2014 article claims that Petrobras' President, Ms. Foster, waited almost a year and a half after receiving warnings from SBM to start an internal investigation."

CONFIDENTIAL

During our meeting we also discussed the internal investigation concerning compliance related matters. As I told you our internal investigation is ongoing and as is usual with these type of investigations it may take quite some time before it is completed. I would like to stress that as soon as I am able to provide you any update I will inform you soonest.⁴⁸⁵

184. In a May 2014 letter from Mr. Chabas to Petrobras, Mr. Chabas stated that it had only recently become aware of bribes involving Petrobras:

We refer to your letter of 24 May 2014 in the above matter which was in response to a call between Ms. Graca Foster and Mr. Chabas.

This is to confirm that the information that was provided to us by the Dutch Public Prosecutor's Office (Openbaar Ministerie "OM") that several millions of US dollars were paid to a Petrobras employee by our former primary agent in Brazil was shared with you as soon as we became aware of it. I shared it with Ms. Graca Foster in the spirit of transparency and cooperation that benefits our longstanding relationship. We know no more than we have shared with you and that it relates to payments in 2004 and 2006-2011. The information shared with you was not accessible to us before; it has been obtained through cooperation between the Dutch and Swiss Authorities.⁴⁸⁶

185. Consistent with the May 2014 letter, Mr. Formigli also testified that Petrobras was not aware of the existence of bribery payments involving Petrobras until May 2014.⁴⁸⁷ Further, SBM issued press releases as late as April 2, 2014, stating that its own investigation had not found credible evidence about improper payments in Brazil:

In respect of Brazil there were certain red flags but the investigation did not find any credible evidence that the Company or the Company's agent made improper payments to government officials (including state company employees). Rather, the agent provided substantial and legitimate services in a market which is by far the largest for the Company.⁴⁸⁸

186. Second, Dr. Henning mischaracterizes Petrobras's CIA conducted in February and March 2014. He states that "Petrobras's investigation concluded that there were no payment of

⁴⁸⁵ Letter from Bruno Chabas (SBM) to Jose Formigli (Petrobras), July 10, 2012, [PBRCG_01591743].

 $^{^{486}\,}Letter\;from\;Bruno\;Chabas\;(SBM)\;to\;Pedro\;Arruda\;(Petrobras),\;May\;27,\;2014,\;[PBRCG_00598685\;at\;p.\;1].$

⁴⁸⁷ Jose Miranda Formigli Filho Deposition, April 22, 2016, 128:2-9, "A. The first information about the existence of bribery payments came to PB through SBM in May of 2014 through information received by SBM from the Netherlands public prosecution services. This was the first indication of bribery payments that was received by PB regarding SBM. Therefore, outside the working scope of the commission."

⁴⁸⁸ "SBM Offshore Findings of Internal Investigation," SBM Offshore Press Release. April 2, 2014, available at http://www.sbmoffshore.com/?press-release=sbm-offshore-findings-internal-investigation.

bribes."⁴⁸⁹ The CIA did not conclude that "there were no payments of bribes." Rather, while the CIA concluded "no facts or documents evidencing any payments of bribes to employees [of] Petrobras were found,"⁴⁹⁰ it recommended that "the probe should be continued by Corporate Security" and that based on the findings to date, the information obtained by the CIA should be provided to the TCU, CGU and the Federal Prosecutors Office for assessment.⁴⁹¹

- 187. Third, Mr. Devor asserts that the CIA performed by Petrobras was flawed. He states: According to Petrobras, on March 31, 2014, the CIA relating to SMB concluded that no internal evidence was found to support bribery allegations related to SBM. Eventually, and as discussed above, Ms. Foster acknowledged that bribes *had* taken place in connection with contracts between Petrobras and SBM, of which PwC eventually became aware as well and discussed in a memorandum written by a PwC Forensic Services team in 2015 (and discussed in more detail below). *This was an example of numerous flaws in the CIAs performed by the Company* in connection with its investigation into allegations of bribes, bid-rigging, and overpayments to contractors on large construction projects that arose in connection with the larger Lava Jato investigation undertaken by Brazilian authorities. Many of the flaws in the CIAs were compiled in a report prepared by PwC's Advisory Forensic Services group.⁴⁹²
- 188. Mr. Devor's assessment is improperly based on hindsight. At the time of the investigation, Petrobras was not aware of the existence of bribes, nor had PwC assessed and provided input on Petrobras's CIA process. Further, as discussed above, the CIA recommended that Corporate Security continue to investigate and report its findings to the TCU, CGU and the Federal Prosecutors Office.⁴⁹³ When Petrobras did become aware, in May 2014, of the existence of SBM bribes to Petrobras employees, it followed the recommendation of the CIA and

⁴⁸⁹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-38.

⁴⁹⁰ Internal Commission of Inquiry ("CIA"), DIP DE&P 17/2014, February 13, 2014, "CONCLUSIONS Based on the work conducted so far and restricted to its regulatory competences, the Commission concluded that no facts or documents evidencing any payment of bribes to employees PETROBRAS were found."

⁴⁹¹ Internal Commission of Inquiry ("CIA"), DIP DE&P 17/2014, February 13, 2014, "RECOMMENDATIONS The Commission understands that the probe should be continued by Corporate Security. Once important situations are identified, they should be forwarded to the authority that has instituted it. Considering the facts discussed in this report and its appendixes, the Commission believes that they should be referred to the Federal General Comptroller, the Federal Court of Audit and the Federal Prosecutors Office to be assessed according to their prerogatives."

⁴⁹² Expert Report of Harris L. Devor, CPA, May 6, 2016, ¶ 271.

⁴⁹³ Internal Commission of Inquiry ("CIA"), DIP DE&P 17/2014, February 13, 2014, "RECOMMENDATIONS The Commission understands that the probe should be continued by Corporate Security. Once important situations are identified, they should be forwarded to the authority that has instituted it. Considering the facts discussed in this report and its appendixes, the Commission believes that they should be referred to the Federal General Comptroller, the Federal Court of Audit and the Federal Prosecutors Office to be assessed according to their prerogatives."

immediately informed the CGU and Federal Prosecutors Office.⁴⁹⁴ Mr. Devor has not explained how a Petrobras CIA could have uncovered the bribes, when it took Dutch investigators two years, with access to information not available to a Petrobras, to determine that bribes had been made to Petrobras employees.⁴⁹⁵

189. Moreover, Mr. Devor ignores the purpose and limitations of a CIA. A CIA is a compliance tool "aimed at the clarification of situations and circumstances concurrent to the accomplishment of non-conformities." The CIA does not play an enforcement role, but rather is designed to convey to the appropriate internal and external parties the information gathered from the internal investigation along with any corresponding conclusions and recommendations. The CIA does not have the ability to investigate items outside of the company, which is a limiting factor in cases like the SBM bribes that were paid to individuals by a third party, and thus were not recorded in Petrobras's books and records. This was acknowledged by the Federal Prosecutors Office report, which stated that the Company was "[1]imited in its investigation powers and techniques"; however, it was able to conduct "extensive research" that aided in the continuing investigation.

⁴⁹⁴ SBM Offshore: Completion of Internal Verification," Petróleo Brasileiro S.A. – Petrobras, March 31, 2014, "Also during the work of the said Internal Commission, they were provided clarifications to the Comptroller General's Office and the Federal Public Ministry. The end of Petrobras' Internal Verification Commission report will be forwarded to the Comptroller General, the Court of Auditors of the Union and the Federal Public Ministry."

⁴⁹⁵ As discussed above, SBM announced its investigation of alleged improper payments in 2012 and represented to Petrobras that it did not become aware of payments to Petrobras employees until May 2014.

⁴⁹⁶ Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at p. 1], "Internal Investigation: A set of actions, based on the legal rules of the "duty to investigate," aimed at the clarification of situations and circumstances concurrent to the accomplishment of non-conformities of whatsoever nature within the scope of Petrobras System."

⁴⁹⁷ Petrobras, "Standard for the Work of an Internal Invest Commission RPQO," Code: PP-0V4-00056-C, [PBRCG_00261646 at p. 7], "10.1 The Final Report must be submitted completed, with all the information regarding the Internal Investigation Commission and with the corresponding conclusions...10.3 The Commission shall not be responsible for defining it as a crime, establishing the type of punishment or administrative sanction to be enforced to the involved parties. It shall be responsible, though, for investigating any non-conformities in view of the Company's internal regulations and any indications of irregularities, appointing them in the Final Report...10.5 The Commission shall hold a meeting with the Establishing Authority to submit the results achieved with the works. This presentation shall evidence, in a summarized manner, the most important points contained in the Final Report. 10.6 In case there is indication of irregularities that, in theory, could be considered as a crime, the Establishing Authority shall forward a copy of the Final Report to the Legal Department for analysis and evaluation of the need to inform the investigations to the relevant bodies."

⁴⁹⁸ Gerson Luiz Goncalves Deposition, February 19, 2016, 182:6-14, "A. Because the internal commission does not have the prerogative to investigate things of this nature. These things happen outside the company. It is impossible, this type of thing. This is the role of the federal police and the prosecution services. The report is submitted to the public prosecution services and they continue with the investigation. They have the prerogative to continue with the investigations."

⁴⁹⁹ Office of Federal Prosecution in Rio de Janeiro, Criminal investigation proceeding MPF/PR/RJ 1.30.001.000837/2014-68 Criminal proceeding 0022781-56.2014.4.02.5101 (Police inquiry 002/2014-DFIN/DICOR/DPF) and correlated procedures, p. 11, "Petrobras, between February and March 2014, convened an Internal Inquiry Commission, whose Final Report, with documents, it sent to the Federal Prosecutor's Office - MPF. Limited in its investigation powers and techniques, it did not succeed in finding definitive evidence of what was notified in Wikipedia. However, it conducted extensive research such as records of accesses to

190. Finally, Dr. Henning suggests that an investigation of SBM may have led to the discovery of the cartel,⁵⁰⁰ but does not provide any support for his assertion. For example, Dr. Henning does not explain how a fraud involving a company that was *not* a member of the Cartel would have led to the discovery of the Cartel.

c. January 2009 LA Times Article

- 191. Dr. Henning claims that "[t]here was a conscious effort by Petrobras's executive management to ignore the issues brought to their attention, and to purposefully fail to perform proper investigations when faced with clear violations of the Company's internal controls and numerous red flags indicating potential fraudulent activity within Petrobras's procurement process." As an example, he states that "Messrs. Barbassa and Gabrielli both received a January 9, 2009 email to Petrobras's Board of Directors regarding the publication of a scathing article in the L.A. Times, which alleged that a former American executive admitted to paying bribes to Petrobras officials." Dr. Henning claims that "Messrs. Gabrielli and Barbassa made no attempt to investigate or improve any of the obvious internal control deficiencies that would allow these overpayments to occur." 503
- 192. However, Dr. Henning mischaracterizes Messrs. Gabrielli's and Barbassa's response to the email. Rather than "making no attempt to investigate," Mr. Barbassa testified that this type of email "would have been dealt by the appropriate structure in the company." Similarly, Mr. Gabrielli testified that he did not recall the email, but believes it would have been forwarded to Petrobras's legal department:
 - Q. Do you recall the article, Mr. Gabrielli? A. No. Q. Do you recall any investigation into the subject matter of this e-mail? A. I believe that must have

the company and records of telephone calls, diligences to SBM in The Netherlands and several interviews, producing information that helped continue the investigation by the state-owned company."

⁵⁰⁰ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-38, "If a comprehensive investigation had been undertaken to address the allegations of bribes paid to SBM including a company-wide review of its contracting process the existence of the illegal cartel may have been uncovered."

⁵⁰¹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, pp. 1-13 – 1-14.

⁵⁰² Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-13.

⁵⁰³ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-13.

⁵⁰⁴ Almir Guilherme Barbassa Deposition, April 12, 2016, 196:11-197:9, "Q. Do you know if there was any follow-up to this e-mail? A. I don't remember because it would have been dealt by the appropriate structure in the company.... This was taken to the knowledge of the CEO, and she took the actions needed. Q. What were those actions? A. I don't know which actions. He knew at the time. At that time the company was prepared to deal with situations like this."

been forwarded to the legal department. Q. Do you know that or are you assuming that to be the case? A. I am assuming that. I don't remember this subject.⁵⁰⁵

193. Dr. Henning improperly suggests that since Messrs. Barbassa and Gabrielli do not recall personally investigating the issue, no follow up was performed. Messrs. Barbassa and Gabrielli clearly indicate that Petrobras had channels that would address these types of issues, ⁵⁰⁶ which, as discussed in Section VIII, is consistent with my analysis of Petrobras's ICFR systems. And in fact, Petrobras did open an investigation into this issue, which recommended an 18-month suspension on the vendor, Control Components Inc., that was involved in the bribes.

This Commission proposes: a) Suspend corporately Control Components Inc., under Petrobras for a period of eighteen months; b) That after the end of the suspension period, the company's return to the register, the bidding and contracting with Petrobras become conditioned, among others, to biannual presentation of evidence of the satisfactory progress of the actions agreed with the DoJ and the deadline for this established, in conformity with item 3.10, sub-item "a" of this report. 507

d. Plaintiffs' Experts Mischaracterize TCU Reports

194. Plaintiffs' Experts mischaracterize statements contained in TCU reports. For example, Dr. Henning improperly characterizes TCU audits as investigations and claims that "[t]he Company limited its work to only challenging the TCU, attempting to highlight any errors and

⁵⁰⁵ Jose Sergio Gabrielli Deposition, April 20, 2016, 192:20 – 193:6.

⁵⁰⁶ This is addressed by the above referenced deposition testimony of Messrs. Barbass and Gabrielli.

⁵⁰⁷ DIP Materials-29/2009, February 2, 2009, [PBRCG_01800710], p. 1, "3.1 – On 01/08/2009 the Los Angeles Times (Annex II) published a report which stated that Mr. Mario Corvino, company executive of Control Components Inc. - CCI admitted in court he has made bribery payments to employee(s) of Petrobras...3.3 – On 01/15/2009 the Executive Manager of the Materials Unit determined that CAASE was instituted to investigate the facts, due to the negative affect on the image of Petrobras and being configured as active corruption. It also determined that the preventive enrollment of the Control Components Inc., company was on the list of companies barred from negotiating with Petrobras."; p. 5, "Considering that: 7.1 - It was shown that the CCI committed legal and administrative irregularities involving senior executives of the company, who have pled guilty in active corruption cases in the United States and abroad. 7.2 - That the irregularities that occurred confront the principles of the Petrobras System Code of Ethics. 7.3 - What is the ICC provisionally barred from bidding and contract with Petrobras since 15/01/2009. 7.3 - This Commission proposes: a) Suspend corporately Control Components Inc., under Petrobras for a period of eighteen months; b) That after the end of the suspension period, the company's return to the register, the bidding and contracting with Petrobras become conditioned, among others, to biannual presentation of evidence of the satisfactory progress of the actions agreed with the DoJ and the deadline for this established, in conformity with item 3.10, sub-item "a" of this report."

⁵⁰⁸ For example: Expert Report of Harris L. Devor, CPA, , May 6, 2016, ¶269, "...the TCU was raising issues regarding possible overpricing and the manipulation of bids between, and specifically mentioning, consortia and the Company going back as far as 2009."; Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, pp. 3-4, "The TCU has performed the most in depth investigations...The TCU's investigations...are still ongoing."

⁵⁰⁹ For example: Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, pp. 3-4, "The TCU has performed the most in depth investigations...The TCU's investigations...are still ongoing."; p. 1-13, "Mr. Gabrielli recalled that the initial 2009 TCU investigation..."; p. 1-20, "As a result of investigations performed by the TCU...".

flaws made in its analysis."⁵¹⁰ Such claims mischaracterize the role of the TCU, the nature of its audits, and its communications with Petrobras.

- 195. As discussed in Section VIII.B.1 above, the TCU performed routine audits, not investigations, of Petrobras. GAPRE communicated with the TCU on a regular basis⁵¹¹ and Internal Audit and Legal assisted in responding to information requests and other TCU inquiries.^{512,513}
- 196. It is my understanding that most TCU audits were conducted as part of Fiscobras, the annual fiscal plan to assess public works projects financed at least in part by the Brazilian government.⁵¹⁴ Petrobras was responsible for many of the largest government-funded projects so was therefore subject to TCU audits as part of Fiscobras.
- 197. TCU audits generally began at the start of a calendar year and continued until July to August so that they could be assessed by the National Congress of Brazil.⁵¹⁵ In general, the TCU would send preliminary reports to Congress to support its opinions and thereafter allow Petrobras an opportunity to explain its views and provide additional information as necessary.⁵¹⁶
- 198. Disagreements often arose between the TCU and Petrobras, due to the use of different reference materials. For example, the TCU would use benchmarks for projects from public databases that were much smaller in scope or otherwise not comparable to Petrobras's large-scale capital projects. Such disagreements were of a methodological nature; there was never any mention of a cartel or the Illicit Payment Schemes.⁵¹⁷

⁵¹⁰ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-31.

⁵¹¹ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 54th Audit Committee Meeting, September 27, 2012, [PBRCG_00721665 at pp. 2-5]; "Internal Audit – Relationship with CGU (Federal General Controllership) and TCU (Federal Audit Court)"; For example, in a meeting in September 2012, management discussed planned TCU and CGU audits in the second half of 2012 and 2013. See also: Petroleo Brasileiro S.A. – Petrobras, Minutes of the 54th Audit Committee Meeting, September 27, 2012, Annex I - Presentation to the Audit Committee: Relationship with Government Control Bodies 1/1/2012 - 6/30/2012, p. 23, "Activities of the Brazilian General Accounting Office Second Half of 2012 and 2013."

⁵¹² Gerson Luiz Gonçalves Deposition, February 19, 2016, 128:5-129:6, "Q. Let me ask a different question. What did the TCU do? A. Let me explain then. Every state company has its investments, investment plans, approved by the Brazilian Congress. Okay? Therefore, the accounts court audits on a yearly basis key projects approved by the Congress. In the case of Brazil, large projects are the ones connected to Petrobras. Therefore, the accounts court audits a large amount of documents within the company. Contracts. Q. Are you done? A. Audits, the execution of each one of these projects that are approved by the Congress. Q. Are you involved in communicating with the TCU in connection with their audits? ... A. What happens at Petrobras, we need to have control integrated measures so that the internal audit, the accounting courts and the federal general controllers do not audit the same processes within the same period of time, so when TCU, the TCU audits anything, I follow up with their work."

⁵¹³ May 17th, 2016 discussion with Petrobras Personnel.

⁵¹⁴ May 17th, 2016 discussion with Petrobras Personnel.

⁵¹⁵ May 17th, 2016 discussion with Petrobras Personnel.

⁵¹⁶ May 17th, 2016 discussion with Petrobras Personnel.

⁵¹⁷ May 17th, 2016 discussion with Petrobras Personnel.

While Petrobras disagreed with the TCU at times, it was not the case that it "only

challenged" TCU findings. In some cases Petrobras agreed with the TCU's findings. For example, the TCU indicated that a certain clause within a Comperj contract could have been improved. Petrobras agreed with the finding and re-wrote the Comperj clause. 518 Dr. Henning inappropriately considers "irregularities" in TCU audits to be synonymous with ICFR deficiencies.⁵¹⁹ However, it is my understanding that the TCU did not perform ICFR audits and that the purpose of its audits often was to determine whether the project should be continued or not. 520 Further, the TCU did not use a materiality threshold in its audits. 521 Therefore, for TCU "irregularities" to be relevant, they would need to be material and clearly relate to ICFR. An irregularity related to contracting that might have resulted in Petrobras overpaying for an asset would not necessarily implicate ICFR. 522 In addition, TCU audits often took five years or more to complete so the fact that audits remained open for multiple years was not unusual.⁵²³ As Petrobras provided additional information to the TCU, it was often the case where preliminary findings were later found to be incorrect.⁵²⁴ Therefore, the mere existence of a TCU finding would not automatically lead one to conclude that a deficiency in ICFR existed. 525 All communications with the TCU were cataloged by GAPRE⁵²⁶ while Internal Audit 201.

⁵¹⁸ May 17th, 2016 discussion with Petrobras Personnel.

⁵¹⁹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-22, "Subsequent to 2009 and through 2015, the TCU continued discussions with Petrobras and updated its work on these known irregularities. Although Petrobras continued to challenge TCU's methods, the agency continued to find multiple issues with regard to Petrobras' capital project budgeting and the bidding processes. And these are the same internal control deficiencies that the TCU has continued to note throughout its investigations, which to my knowledge, are still ongoing."

⁵²⁰ May 17th, 2016 discussion with Petrobras Personnel.

⁵²¹ Gerson Luiz Gonçalves Deposition, February 19, 2016, 132:6-17, "A. I have to explain something that is important. TCU establishes like an issue classification. When it says there is no issue, no problems, it repeats. Indications of serious irregularities here. Overpricing and overbilling. In other words, it establishes criteria independent of amounts involved. It does not make a distinction between what is relevant or what is irrelevant. So if it audits an enterprise of \$20 million or if it audits work worth \$20 billion, it uses the same methodology to classify the nonconformities."

⁵²² I understand from the expert report of Philip K. Verleger, Jr., Ph.D that the alleged overpayments on Petrobras's refining megaprojects should not have been construed as red flags with respect to corruption or poor internal controls.

⁵²³ May 17th, 2016 discussion with Petrobras Personnel.

⁵²⁴ May 17th, 2016 discussion with Petrobras Personnel.

⁵²⁵ Marcos Panassol Deposition, April 19, 2016, 80:25 - 81:10, "My testimony is there is a process and we follow that process. We understand the process, gather evidence and what it mentioned was that it's customary for TCU makes requests, the company defends itself and things are sorted out and that will take some time. So a communication by TCU raising a concern, it's not necessarily a conclusion that there was a noncompliance in that process."

⁵²⁶ Marcos Panassol Deposition, April 19, 2016, 42:2-11, "Q. And what did PwC do in connection with these communications received from TCU and CGU? Did PwC Brazil review these communications? A. Yes. As documented here, we met with the -- all such communications are addressed to the CEO of the company. So in the CEO's office there is a person there that is in charge of that, of receiving and keeping a log."

presented a summary of TCU requests and findings to the Audit Committee.⁵²⁷ In connection with its annual audits, PwC inspected the logs and, at times, the underlying information, specifically to look for indications of irregularities, overpricing or other extraordinary items.⁵²⁸ PwC did not identify that TCU findings were indicative of a material weakness in ICFR.

2. Plaintiffs Have Failed to Consider Petrobras ICFR System

202. If, based on the relevant factual information, a "red flag" related to Petrobras's ICFR did exist, one must assess whether the "red flag" represented a *deficiency* in the context of Petrobras's ICFR system. For example, one would need to understand how the "red flag" could have or should have been detected and addressed within Petrobras's ICFR system. This consideration includes an assessment of the control that should have detected the "red flag," and an examination of whether the control was designed and operating effectively. Plaintiffs' Experts have not performed this analysis.

203. As discussed in detail in Section VIII, Petrobras had extensive systems and processes in place to establish, maintain, evaluate, and, when necessary, remediate deficiencies in its ICFR. Without the context of Petrobras's ICFR system, an issue examined in isolation may appear to be a "red flag," when it could be, in fact, an example of Petrobras's ICFR working effectively.

204. For example, as previously discussed, Dr. Henning suggests that deficiencies identified by Internal Audit were red flags and criticizes Petrobras and its CFO for not "launching an investigation" in response to Internal Audit's findings. Dr. Henning claimed:

A summary of the minutes for the 59th meeting of the audit committee on March 14, 2013 identifies that, in the third quarter of 2012, Petrobras' internal audit team identified 436 items in which the Company was not compliant with its own internal policies. *Rather than launching an investigation or organizing a team*

⁵²⁷ For example: Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, [PBRCG_01070506 at p. 11], "3.1 – Recommendations from the Federal Comptroller General – CGU. 3.2 – Recommendations arising from the Federal Audit Court – TCU."

⁵²⁸ Marcos Panassol Deposition, April 19, 2016, 42:2-17, "Q. And what did PwC do in connection with these communications received from TCU and CGU? Did PwC Brazil review these communications? A. Yes. As documented here, we met with the -- all such communications are addressed to the CEO of the company. So in the CEO's office there is a person there that is in charge of that, of receiving and keeping a log. So we had access to this person. We had access to the log and we went through the log to identify communications that would have, as described here, could have indications to irregularities, overpricing and extraordinary items. Anything that would draw our attention as auditors."; 45:3-7, "A. If there was any discussion of that in the TCU memos we would need to understand what they relate to, what was the company's response and we would have to assess that as part of our audit."

⁵²⁹ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-36.

CONFIDENTIAL

to address the controls deficiencies that led to the noncompliance, Mr. Barbassa simply ignored the findings. In fact, Mr. Barbassa testified that, although he was Petrobras' Chief Financial Officer at the time, he had no recollection of learning of these numerous issues, which included certain items related to Odebrecht, a member of the cartel. 530

- 205. Dr. Henning mischaracterizes Mr. Barbassa's testimony and the routine nature of such ongoing processes at Petrobras to identify key risks, test controls, and remediate deficiencies. A core function of Internal Audit was to recommend and follow-up on the remediation of deficiencies, and it routinely communicated its findings to Petrobras Leadership.⁵³¹ With respect to the specific "red flag" that Dr. Henning identified in the 59th Audit Committee meeting minutes, as Mr. Barbassa explained in his deposition testimony, this communication reflected a phase in Petrobras's ICFR process:
 - Q. Would you receive reports from internal audit that contained information in sum or substance similar to what we have seen here on [the 59th Audit Committee Meeting Minutes]?...A. There was a certification process from SOX that contemplated the audit of the -- the work of internal audit. In verifying the control points there were many, thousands at Petrobras, and those that were found with some kind of non-compliance were reported to the process and for those people in charge that were involved, so that appropriate adjustments could be made. So once the audit was done, it would report to each area the respective points, and those areas would work towards a solution. What this is showing is a summary of that work, which is an ongoing phase of the process.⁵³²
- 206. Consistent with Mr. Barbassa's explanation that the identification of the deficiencies was a phase in the ICFR process, during the same Audit Committee meeting Internal Audit discussed the remediation status of previously-identified deficiencies.⁵³³

⁵³⁰ Expert Report of Steven L. Henning, Ph.D., CPA, May 6, 2016, p. 1-36.

For example: Petroleo Brasileiro S.A. – Petrobras, Minutes of the 46th Audit Committee Meeting, August 24, 2011, [PBRCG_00712348 at p. 25-26], "1) Internal audit - Report of Internal Audit Activities of the 2nd trimester of 2011..."; See also: Petróleo Brasileiro S.A. – Petrobras 2012 Annual Report of Internal Audit Activities, [PBRCG_01070506 at p. 2], "Some of the reviews are related to the evaluation and certification of the internal control environment, in line with the requirements of Sarbanes-Oxley (SOX). In addition to the above, as in previous years, a significant portion of the work concerns unscheduled reviews that were aimed at addressing demands on the Audit Committee from senior management, Executive Management and the Ombudsman, as situation aligned with the main objective of this AUDIT of advising senior management in the control of the main activities of the Petrobras Group in Brazil and abroad, in an effective, integrated and strategic way. AUDITING also participated in Working Groups, Petrobras Professional Training Programs, Forums, Committees, Commissions and Processes requiring continuous coordination with the Control Bodies, mainly the Federal Audit Court (TCU), Federal Comptroller General (CGU) and the Audit Board."

⁵³² Almir Guilherme Barbassa Deposition, April 12, 2016, 199:21-200:15. (emphasis added).

⁵³³ Petroleo Brasileiro S.A. – Petrobras, Minutes of the 59th Audit Committee Meeting, March 14, 2013, [PBRCG_00727994 at p. 3-13]. *For example*: "Manager Gerson then mentioned pending issues from previous reports, informing that there are 24 pending issues that are being followed up by the Audit."

207. Neither Dr. Henning nor Mr. Devor appear to have considered Petrobras's systems and processes to establish, maintain, evaluate, and, when necessary, remediate deficiencies in its ICFR. It is only with such an evaluation that one can assess whether an alleged "red flag" could have or should have indicated to Petrobras Leadership a potential material weakness in ICFR.

3. Failure to Assess the Severity of the Deficiency

208. Finally, if, based on the relevant factual information and a consideration of Petrobras's ICFR system, one determines that a "red flag" should have been identified as an ICFR deficiency, one must then assess the severity of the deficiency based on information that was available to Petrobras Leadership at the time.⁵³⁴ As previously discussed, a material weakness is a deficiency or a combination of deficiencies "such that there is a *reasonable possibility* that a *material misstatement* of the company's annual or interim financial statements will not be prevented or detected on a timely basis."⁵³⁵

209. In assessing whether there is a reasonable possibility that a material misstatement will not be prevented or detected, the SEC states that "all relevant information" must be considered. ⁵³⁶ For example, one should evaluate whether there were compensating controls that could mitigate the effect of the control deficiency.

Management should evaluate the effect of compensating controls when determining whether a control deficiency or combination of deficiencies is a material weakness. To have a mitigating effect, the compensating control should operate at a level of precision that would prevent or detect a misstatement that could be material.⁵³⁷

⁵³⁴ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], p. 34, "Exchange Act Rules 13a-15 and 15d-15 [17 CFR 240.13a-15 and 15d-15], "In order to determine whether a control deficiency, or combination of control deficiencies, is a material weakness, management evaluates the severity of each control deficiency that comes to its attention."

⁵³⁵ PCAOB Auditing Standard No.5, Appendix A, A7,". A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis." (emphasis added).

⁵³⁶ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], p. 37, "Exchange Act Rules 13a-15 and 15d-15 [17 CFR 240.13a-15 and 15d-15] "In determining whether a deficiency or a combination of deficiencies represents a material weakness, management considers all relevant information."

⁵³⁷ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], p. 37, "Exchange Act Rules 13a-15 and 15d-15 [17 CFR 240.13a-15 and 15d-15]

Compensating controls are controls that serve to accomplish the objective of another control that did not function properly, helping to reduce risk to an acceptable level.⁵³⁸

210. Further, as previously discussed, this assessment of "relevant factual information" should be based on information that was available to Petrobras Leadership *at the time* the alleged "red flags" were identified and not based on hindsight. Not only have Plaintiffs' Experts misrepresented and ignored relevant facts and failed to consider alleged "red flags" in the context of Petrobras's ICFR, but Plaintiffs' Experts have not assessed, without the benefit of hindsight, the severity of any potential deficiency.

XI. Conclusion

211. Based on the considerations and the analyses discussed above, in my opinion, Petrobras's process of planning, staffing, executing and reporting the effectiveness of its ICFR during the Relevant Period was appropriate and provided Petrobras Leadership a reasonable basis for identifying and assessing any deficiencies in ICFR. I have considered the alleged "red flags" discussed by Dr. Henning and Mr. Devor. In my opinion, Plaintiffs' Experts' analyses and conclusions concerning Petrobras's ICFR are flawed, because they fail to consider the limitations of ICFR, inappropriately use hindsight, and fail to distinguish between ICFR and operational or compliance controls. Further, Plaintiffs' Experts have failed to perform a proper evaluation of whether alleged "red flags" could have or should have indicated to Petrobras Leadership a material weakness in ICFR. Specifically, in their analyses of the alleged "red flags," (1) Plaintiffs' Experts have not considered relevant factual information, (2) they have failed to assess "red flags" in the context of Petrobras's ICFR system, and (3) to the extent that ICFR deficiencies should have been identified, they have failed to assess the severity of the deficiencies based on information that was available to Petrobras Leadership at the time.

I declare that the foregoing accurately reflects my opinions in this matter.

⁵³⁸ 17 CFR Part 241, [Release Nos. 33-8810; 34-55929], p. 37 (FN49), "Exchange Act Rules 13a-15 and 15d-15 [17 CFR 240.13a-15 and 15d-15]

CONFIDENTIAL

Michael Ussery

Muhael

Michael J. Ussery
Pt Platinum Consulting, LLC
556 Silicon Drive, Suite 103
Southlake, Texas 76092
(817) 416-6846
Cell: (817) 239-8191

Executive Summary

Senior financial executive and CPA with significant internal controls, Sarbanes-Oxley (SOX), corporate finance, international accounting, SEC reporting, budgeting, expert witness, and information technology experience. Highlights include:

- Consultant to CPA firms, small businesses and multi-national companies on SEC reporting, current accounting rule application, derivatives, foreign currency accounting IFRS and many others;
- Outsourced entire accounting and SEC reporting for a registrant that recently sold its operating assets while maintaining SOX compliance;
- Chief financial officer and controller experience in both large and small companies including SEC reporting companies and privately-held enterprises;
- Highly rated lecturer on such topics as avoiding the accounting failure trap, SEC compliance, IFRS and current accounting standards:
- Turn around/ workout experience:
- Industry Experience: Oil and gas, telecommunications, IT consulting services, mortgage banking, manufacturing, banking and financial services;
- 10 years "Big 4" accounting firm experience.

Experience

Pt Platinum Consulting Services, LLC Principal/owner

December 2000-Present

PtPC provides accounting advisory services and outsourcing services to accounting firms, SEC registrants and privately-held companies. PtPC assists clients transitioning from being a private company to the public reporting responsibilities by assisting in setting up internal controls, SEC reporting compliance procedures and preparing the company's initial filings and reports required for public companies. PtPC also serves as a technical resource to assist in deciphering complex accounting rules for US GAAP and SEC reporting purposes, responding to SEC comment letters and assisting in the preparation and review of SEC filings, including 10-Ks, 10-Qs, 8-Ks, and registration statements. As an advisor, PtPC supplements the SEC registrant's staff and provides that critical bridge between client and the auditor.

Past and present clients include public companies, privately held companies, accounting

firms, and law firms.

Temporary CFO Consulting Services

Primidom Lending Corporation Chief Financial Officer, October 2001-June 2003

Part-time, acting CFO in this privately-held mortgage broker. As CFO and principal accounting officer, my responsibilities include all financial operations and mortgage operations, including raising capital, planning and oversight of the mortgage processing operations.

Key Accomplishments:

- Established a financial reporting and loan processing monitoring system that tracked loan processing costs and revenues generated.
- Negotiated and established new banking relationships.
- Created long-term forecasting and budgeting models for investor information.
- Commenced negotiations with tax authorities on tax lien workout.

SCA Technologies Corporation Chief Financial Officer, December 2000- September 2001

Worked as the chief financial officer for this privately-held technology services company. As the CFO, my responsibilities included monitoring cash flow, negotiating lending agreements, planning and budgeting and positioning the company for an IPO.

Key Accomplishments:

- Negotiated major customer contracts, including favorable advanced payment and financial milestone payments.
- Negotiated and settled a major litigation against the company.
- Established a comprehensive planning and budgeting cycle with monthly updates and statistical analysis of financial objectives compared to actual results.

CPE, Inc Lecturer, Concurrent Experience November 1993- Present

Lecturer on various accounting topics including international expansion and foreign currency transactions, SEC reporting, current accounting and SEC topics, and SOX implementation.

NetLojix Communications, Inc. Chief Financial Officer, 1999-November 2000

Worked as the Chief Financial Officer of a NASDAQ listed communications, PC maintenance and support and eBusiness applications provider. As the CFO, responsibilities included treasury management, accounting, including SEC compliance and reporting, investor relations, relationships with lenders and investment bankers and planning and budgeting. As the senior executive in Ft. Worth, responsible for the entire operating staff of the company's largest division of over 100 employees.

Hired at NetLojix specifically to oversee the Ft. Worth operations and to correct operating and financial difficulties experienced by the company. NetLojix was losing approximately \$1.5 million per month, had little availability under its secured credit facility and was over 60 days past due on most of its vendor payables including over \$4 million in arrears on its primary network service provider. Additionally, the Company was at risk of losing its NASDAQ Small Cap listing due to failure to meet minimum listing requirements. In a little over a year, the Company was debt free, current on all vendor bills, was able to meet all NASDAQ listing requirements and had over \$1 million in the cash.

Key Accomplishments:

- Initiated a strategic survival plan instrumental in developing a strategic survival plan for the Company which included divestiture of the Company's largest division, shrinking the Company by over 50%, reductions in staffing and reductions in operating expenses.
- <u>Developed key reporting and management information tools</u> streamlined and simplified cash management and management information reporting tools which accelerated the identification of areas of management concern and focus.
- <u>Negotiated with creditors</u> Commenced negotiations with the company's major vendors and negotiated a 3 year note with payment terms that met the Company's cash flow requirements. Negotiated reduced payment terms with several network service vendors. As a result of these negotiations, service was never interrupted and the company obtained cash flow relief.
- Negotiated an increased credit line and Completed an equity Credit Line While
 the Company was experiencing cash flow problems, sought and obtained increased
 credit availability under the company's secured borrowing line of credit and
 completed SEC filing requirement s and satisfied a transaction review by the SEC
 staff so that the Company could draw on its equity line of Credit agreement.

Consultant/Lecturer, 1998-1999

Consulted with small CPA firms on SEC compliance and accounting interpretations. Provided consulting services to a small company placed in receivership by the SEC. Lectured to numerous groups and organizations, including GTE and EDS, on accounting related matters including current SEC rules and regulations, oil and gas finance practices,

initial public offerings, accounting for international operations, current US GAAP requirements and others.

Triton Energy, Dallas, Texas Controller, 1993 - 1998

Worked as the controller of a \$900,000,000 (assets) multinational, independent exploration and production company. Administered the company's financial accounting and reporting processes on a worldwide basis. Prepared all external reporting. Responsible for SEC reporting and compliance. Developed corporate accounting policies and procedures. Designed and implemented internal controls. Monitored changes in accounting principles and standards to ensure compliance. Coordinated and monitored the work of the independent auditors. Prepared and presented quarterly audit committee reports.

Structured a complex corporate financing which met with SEC approval. Assisted implementation of a new tax structure which saved over \$500,000,000. Managed treasury, accounting, IT, risk management, HR, legal and other aspects of a \$1,000,000,000 joint venture project in Malaysia/Thailand. Managed the company's Far East financial operations. Prepared numerous special SEC filings, none of which required changes. Improved internal management reporting, and shortened quarterly earnings release time by one month. Increased the utility of shareholder reporting. Introduced a proactive approach to the development of new accounting pronouncements.

Price Waterhouse, Dallas, Texas Senior Audit Manager, 1989 - 1993 Audit Manager, 1987 - 1989

Functioned primarily as senior audit manager for some of the Dallas office's largest clients including Exxon Corporation and Maxus Energy Corporation. Additionally, was senior manager in charge of Dual Drilling's initial public offering (IPO). Was lead engagement manager in an IPO for a new client, including interaction with the attorneys, underwriters and the SEC. Wrote and taught the firm's national oil and gas courses. Served on the personnel evaluations committee, as well.

Planned, coordinated, and executed the worldwide audit of a multi-billion dollar company involving over 50 man years and encompassing 80 foreign offices. Consulted and advised on the accounting and disclosure requirements throughout one of the largest environmental disasters in U.S. corporate history. Counseled clients on the accounting treatment for numerous financial transactions, corporate restructuring and adoption of new accounting pronouncements.

Previous Experience

Shelby, Ruckdaschel and Jones, Dallas, Texas. <u>Audit Manager</u>, <u>1986</u> - <u>1987</u>. Served as lead manager for several financial services clients in the Dallas area. Researched accounting issues, and interacted with regulators. Price Waterhouse, Houston, Texas. <u>Audit Senior</u>, <u>1984</u> - <u>1986</u>; <u>Audit Staff</u>, <u>1981</u> - <u>1984</u>. Served primarily in Houston's oil and gas practice as a staff and senior auditor.

Education

BBA - Accounting and Finance, Cum Laude, 1981 Stephen F. Austin State University, Nacogdoches, Texas

Certification

Certified Public Accountant, Texas

Professional Associations

Member, Fort Worth Chapter and Texas Society of CPA's

Member, American Institute of CPA's

Michael J. Ussery Previous Four Years' Testimony

Expert Witness Experience

• Drawbridge Special Opportunities Fund LP and Fortress Value Recovery Fund I LLC f/k/a D. B. Zwirn Special Opportunities Fund, L. P., v. PRC Williston LLC (C.A. No. 9166-VCL). Deposition held on February 27, 2014.

Documents Considered

Document / Bates

Depositions and Exhibits

Almir Guilherme Barbassa Deposition and Exhibits, April 11, 2016 Almir Guilherme Barbassa Deposition and Exhibits, April 12, 2016

Carlos Cesar Borromeu Deposition, April 25, 2016

Octavio Lavocat Cintra Deposition, April 29, 2016

Paulo Roberto Costa Deposition, October 8, 2014

Paulo Roberto Costa Deposition, April 24, 2015

Mauro Rodrigues da Cunha Deposition and Exhibits, April 18, 2016

Mauro Rodrigues da Cunha Deposition and Exhibits, April 19, 2016

Neil Earnest Deposition, April 22, 2016

Alexandre Figueiredo Deposition and Exh bits, April 18, 2016

Jose Miranda Formigli Filho Deposition, April 22, 2016

Venina Velosa da Fonseca Deposition and Exhibits, February 16, 2016

Venina Velosa da Fonseca Deposition and Exhibits, March 9, 2016

30(b)(6) Deposition of Petrobras by Marcio Polito Fontes, September 28, 2015

Maria das Gracas Silva Foster Deposition and Exh bits, April 28, 2016

Maria das Gracas Silva Foster Deposition and Exh bits, April 29, 2016

Jose Sergio Gabrielli Deposition, June 25, 2014

Jose Sergio Gabrielli Deposition and Exhibits, April 20, 2016

Gerson Luiz Goncalves Deposition and Exhibits, February 19, 2016

Nilton Antonio de Almeida Maia Deposition, June 10, 2015

Nilton Antonio de Almeida Maia Deposition, April 14, 2016

30(b)(6) Deposition of Petrobras by Carlos A berto Rechelo Neto, May 3, 2016

Marcos Panassol Deposition and Exhibits, April 19, 2016

30(b)(6) Stein Rasmussen Deposition, April 27, 2016

Alberto Youssef Deposition, October 8, 2014

Produced Documents

PBRCG 00750591-629

PBRCG 00042078

PBRCG 00062943

PBRCG 00084610

PBRCG 00085715

PBRCG 00085976-6091

PBRCG 00086000-1

PBRCG 00086945-54

PBRCG 00096369-98

PBRCG 00160626

PBRCG 00161506 PBRCG 00161527

PBRCG 00161532

PBRCG 00167151-2

PBRCG 00214461

PBRCG_00261646

PBRCG_00261723

PBRCG_00262029

PBRCG_00262033

PBRCG_00262067

PBRCG_00262067

PBRCG 00262062

PBRCG 00262056 PBRCG_00262050

PBRCG_00262042

PBRCG 00262033

PBRCG 00262087-104

PBRCG 00262128-35

PBRCG 00262675-89

PBRCG 00262748-74

PBRCG_00262875-92

PBRCG_00263137

PBRCG 00334241-48

PBRCG_00349569-82

PBRCG 00519539

PBRCG 00573222-26

Confidential

Documents Considered

PBRCG_00573347-55

PBRCG_00573457-60

PBRCG_00573563-5

PBRCG_0057366-9

PBRCG_00573732-6

PBRCG_00578696

PBRCG_00579644

PBRCG_00593864

PBRCG 00596733

PBRCG 00598685-92

PBRCG_00705229-52

PBRCG_00706802

PBRCG_00706810

PBRCG_00708034

PBRCG_00711643-82

PBRCG_00712348

PBRCG_00712545

PBRCG_00721563

PBRCG_00721665

PBRCG_00727152-64

PBRCG_00727165

PBRCG_00727179

PBRCG_00727994

PBRCG_00728049-60

PBRCG_00728395-409

PBRCG_00729752-64

PBRCG_00731919-35

PBRCG_00732597-624

PBRCG_00733441-8

PBRCG_00733600

PBRCG_00734693

PBRCG_00734891-97

PBRCG_00735118

PBRCG_00735166-77

PBRCG_00736044

PBRCG_00736485

PBRCG_00736502

PBRCG_00737917 PBRCG_00750591-629

PBRCG_00763240-62

PBRCG_00766727

PBRCG_00767188

PBRCG_00767988-92

PBRCG_00768047

PBRCG_00771058

PBRCG_00771212

PBRCG_00806899-7058

PBRCG_00807416

PBRCG 00807418

PBRCG_00807422

PBRCG_00807432

PBRCG_00914178

PBRCG_00914191

PBRCG_00914211-30

PBRCG_00914867

PBRCG_01070506

PBRCG_01073080-263

PBRCG_01076070-217 PBRCG_01076218-352

PBRCG_01070210=0

PBRCG_011190243

PBRCG_01119051

PBRCG_01119417

PBRCG_01119429

PBRCG 01120420

PBRCG_01148745-807

. Confidential

Documents Considered

PBRCG_01154682

PBRCG_01155009

PBRCG_01155010

PBRCG_01155335

PBRCG_0115547-8

PBRCG 01155513

PBRCG 01187023-137

PBRCG_01190243-4

PBRCG_01190245

PBRCG_01208141

PBRCG_01211642

PBRCG_01211657

PBRCG_01211758

PBRCG_01211926

PBRCG_01213388

PBRCG 01214065

PBRCG_01215344

PBRCG_01215356

PBRCG_01215409

PBRCG_01215434

PBRCG_01217607

PBRCG_01217709

PBRCG_01218368

PBRCG 01219926

PBRCG_01219962

PBRCG_01224933-99

PBRCG_01226966-71

PBRCG_01227120

PBRCG_01227122

PBRCG 01227124

PBRCG 01237276

PBRCG 01237290

PBRCG_01237293

PBRCG_01237302

PBRCG_01241620

PBRCG_01248734

PBRCG_01260715 PBRCG_01263002

PBRCG 01263002

PBRCG_01265047

PBRCG 01267170

PBRCG_01276590

PBRCG_01284372 PBRCG_01285479-502

PBRCG_01286143-57

PBRCG_01286158

PBRCG_01286189

PBRCG_01286206-11

PBRCG 01286247

PBRCG 01286320

PBRCG_01286375

PBRCG_01352851

PBRCG_01357829

PBRCG_01366464-84

PBRCG_01370140

PBRCG_01370565 PBRCG_01377591

PBRCG_01377630

PBRCG_01377816

PBRCG 01377838 PBRCG_01377874

PBRCG_01377886

PBRCG_01378565

PBRCG_01378706

PBRCG 01379893

PBRCG_01379925

Confidential

Documents Considered

PBRCG_01380050 PBRCG_01384810

PBRCG_01385670

PBRCG_01386383

PBRCG_01386395-432

PBRCG_01386535

PBRCG_01386640

PBRCG_01386948

PBRCG 01387186

PBRCG_01387547

PBRCG 01387983

DDD00 04000050

PBRCG_01388056

PBRCG_01388089

PBRCG_01389494

PBRCG_01389819

PBRCG 01390724

PBRCG 01390791

PBRCG_01390919

PBRCG_01392593

PBRCG_01392667

PBRCG_01392696

PBRCG_01393116

PBRCG_01412610

PBRCG_01431340

PBRCG_01448428

PBRCG_01501913 PBRCG_01539894-901

PBRCG 01539902

DDD00_04500040_4

PBRCG_01539912-4

PBRCG_01539915-29

PBRCG_01548352

PBRCG_01552265-72

PBRCG_01566308

PBRCG_01591743

PBRCG_01597671 PBRCG_01745515

PBRCG_01770352

PBRCG_01770354

PBRCG_01780712

PBRCG_01780728

PBRCG_01780756 PBRCG_01780757

PBRCG_01780766

PBRCG_01780770

PBRCG_01780774

PBRCG_01780803

PBRCG_01780841 PBRCG_01780869

PBRCG 01780895

PBRCG_01780898

PBRCG_01782775

PBRCG_01782785

PBRCG_01782820

PBRCG_01783629 PBRCG_01783637

PBRCG_01783864

PBRCG_01783871

PBRCG_01783999

PBRCG_01784001

PBRCG_01784005 PBRCG_01784007

PBRCG_01784010

PBRCG 01784147

PBRCG_01784150

PBRCG_01784152 PBRCG_01784227

Confidential

Documents Considered

PBRCG 01784229 PBRCG_01784231 PBRCG 01784434 PBRCG 01784436 PBRCG_01784440 PBRCG_01784449 PBRCG_01784452 PBRCG_01787875 PBRCG_01787879 PBRCG 01787912 PBRCG_01787939 PBRCG_01787941 PBRCG_01787992 PBRCG_01788029 PBRCG_01788033 PBRCG_01788042 PBRCG_01788077 PBRCG 01788113 PBRCG_01788116 PBRCG_01788118 PBRCG_01788122 PBRCG_01788123 PBRCG_01788170 PBRCG 01788194 PBRCG 01788216 PBRCG_01788226 PBRCG_01788629 PBRCG 01788658 PBRCG_01799772 PBRCG_01799793 PBRCG_01799794-806 PBRCG_01799807 PBRCG_01799928 PBRCG_01800078 PBRCG_01800103 PBRCG_01800389 PBRCG_01800409 PBRCG_01800474 PBRCG 01800710 PBRCG_01800720 PBRCG_01800721 PBRCG 01800722 PBRCG_01800723 PBRCG_01800724 PBRCG_01800725 PBRCG_01800726 PBRCG_01800734 PBRCG_01800737 PBRCG_1539902 PBRCG-P_00087479 PBRCG-P_00093994 PBRCG-P_00096301 PBRCG-P_00100000 PBRCG-P_00107644 PBRCG-P_00110852 PBRCG-P_00118005-17 PBRCG-P_00136131 PBRCG-P 00159030-44 PBRCG-P 00771183-5 PBRCG-P 00776686 PBRCG-P_01750785 PBRCG-P_01776564 PBRCG-P_01920738 PBRCG-P_01946480 PBRCG-P_02103081

PBRCG-P_02283348

Confidential

Documents Considered

PBRGC 01363355

PwCBR PETRO 000009766

PwCBR_PETRO_000009951

PwCBR PETRO 000017280-1

PwCBR_PETRO_000054756

PwCBR_PETRO_000054858

PwCBR PETRO 000071493

PwCBR_PETRO_000083733-47

PwCBR_PETRO_000103864

PwCBR PETRO 000103885

PwCBR PETRO 000103889

PwCBR PETRO 000103892

PwCBR_PETRO_000103895

PwCBR PETRO 000103898

PwCBR_PETRO_000104171-82

PwCBR_PETRO_000106497

PwCBR PETRO 000106624-28

PwCBR PETRO 000106634

PwCBR PETRO 000121230

PwCBR_PETRO_000135739-890

PwCBR_PETRO_000137580

PwCBR PETRO 001166725-27

TAYLOR 0000223

Legal Documents

Declaration of Roger A. Cooper, Exhibits Appendix, April 17, 2015

Fourth Amended Complaint in re: Petrobras Securities Litigation, November 30, 2015

Third Amended Complaint in re: Petrobras Securities Litigation, September 1, 2015

Odebrecht Criminal Action No. 5036528-23.2015.4.04.7000/PR, 13th Federal Court of Curitiba

Expert Reports

Expert Report of Harris L. Devor, CPA, May 6, 2016

Expert Report of Steven L. Henning, Ph.D., CPA, and cited documents, May 6, 2016

Public Documents

"About Us," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), available at http://www.coso.org/aboutus.htm

"Assessment of the Procurement Systems of the Brazilian Federal Government and the Brazilian State of Sao Paulo," The World Bank, December 2010

"Clarification about News Report," Petróleo Brasileiro S.A. - Petrobras, November 21, 2014

"Company Profile," SBM Offshore, available at http://www.sbmoffshore.com/whoweare/ companyprofile/

"Fatos e Dados" Translation Certification, Geotext Translations, August 15, 2011

"Fatos e Dados" Translation Certification, Geotext Translations, August 7, 2013

"Fatos e Dados" Translation Certification, Geotext Translations, December 29, 2012

"Fatos e Dados" Translation Certification, Geotext Translations, January 28, 2010

"Fatos e Dados" Translation Certification, Geotext Translations, January 29, 2010

"Fatos e Dados" Translation Certification, Geotext Translations, January 7, 2013

"Fatos e Dados" Translation Certification, Geotext Translations, July 12, 2014

"Fatos e Dados" Translation Certification, Geotext Translations, July 14, 2014 "Fatos e Dados" Translation Certification, Geotext Translations, May 10, 2014

"Fatos e Dados" Translation Certification, Geotext Translations, May 19, 2014

"Fatos e Dados" Translation Certification, Geotext Translations, May 23, 2015

"Fatos e Dados" Translation Certification, Geotext Translations, November 13, 2013

"Fatos e Dados" Translation Certification, Geotext Translations, November 8, 2011

"Fatos e Dados" Translation Certification, Geotext Translations, November 9, 2010

"Fatos e Dados" Translation Certification, Geotext Translations, October 8, 2010

"Fatos e Dados" Translation Certification, Legal Language Services, August 7, 2013

"Fatos e Dados" Translation Certification, Legal Language Services, July 12, 2014 "Fatos e Dados" Translation Certification, Legal Language Services, May 23, 2015

"Internal Control - Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 1992 and 1994

Confidential

Documents Considered

"Internal Control - Integrated Framework," The Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), 2013

"Management Override of Internal Controls: The Achilles' Heel of Fraud Prevention," AICPA, The Audit Committee and Oversight of Financial Reporting, 2005

"SBM Offshore creates new Management Board position for Governance and Compliance," SBM Offshore Press Release, April 10, 2012

"SBM Offshore Findings of Internal Investigation," SBM Offshore Press Release. April 2, 2014

"Staff Statement on Management's Report on Internal Control Over Financial Reporting," U.S. Securities and Exchange Commission, Office of the Chief Accountant, Division of Corporation Finance, May 16, 2005

"The Federal Court of Accounts of Brazil (TCU) and international cooperation," Tribunal de Contas de Uniao, available at http://portal.tcu.gov.br/english/inside-tcu/structure/how-it-works.htm

"The Federal Court of Accounts of Brazil (TCU) and international cooperation," Tribunal de Contas de Uniao, available at http://portal.tcu.gov.br/english/inside-tcu/structure/how-it-works.htm

"The SBM bribery investigation also includes Petrobras", Valor Economico, February 13, 2014

"SBM Offshore: Completion of Internal Verification," Petróleo Brasileiro S.A. – Petrobras, March 31, 2014 17 CFR Part 241. [Release Nos. 33-8810: 34-55929]

17 CFR Parts 210, 228, 229, 240, 249, 270 and 274, [Release Nos. 33-8238; 34-47986]

C. Stauffer, "TIMELINE-Key moments in Brazil corruption probe," The Wall Street Journal, February 22, 2016 CGU Annual Report 2012 (PT)

CGU Opinion of Compliance 2012 (PT)

Codigo de Etica (PT)

File No. S7-02-03, Brazilian Securities Commission letter to U.S. Securities and Exchange Commission, March 7, 2013

Final Report of the Advisory Committee on Improvements to Financial Reporting to the U.S. Securities and Exchange Commission, April 1, 2008

Fraud Auditing and Forensic Accounting, Tommie W. Singleton, Aaron J. Singleton, G. Jack Bologna, Robert J. Lindquist

G. Oliveira, "Monitoring Corporate Money in Brazilian Elections," Edmond J. Safra Center for Ethics, December 26, 2013

Globo News, "Julio Faerman Says That Delivery of the P-57 was Anticipated Because of Campaign," April 20, 2016 (Google Translate)

Globo News, "Petrobras Paid \$25 Million Extra to SBM for Lula to Inaugurate Vessel Platform," December 2014 (Google Translate)

K. Eeuwens and A. Galvao, "Rousseff Ally Says Petrobras Scandal Seeks to Derail Brazil Vote," Bloomberg, September 7, 2014

Office of Federal Prosecution in Rio de Janeiro, Criminal investigation proceeding MPF/PR/RJ 1.30.001.000837/2014-68

Criminal proceeding 0022781-56.2014.4.02.5101 (Police inquiry 002/2014-DFIN/DICOR/DPF) and correlated procedures

PCAOB, "About the PCAOB", Public Company Accounting Oversight Board available at http://pcaobus.org/About/Pages/default.aspx

PCAOB, AU Section 317

PCAOB, Auditing Standard No. 5

PCAOB, Auditing Standard No.5, Appendix A

Petrobras By-Laws

Petrobras Conduct Guide (PT)

Petrobras Corruption Prevention Program Manual (PT)

Petrobras Earnings Call Transcript 2009 Q1

Petrobras Earnings Call Transcript 2009 Q2

Petrobras Earnings Call Transcript 2009 Q3

Petrobras Earnings Call Transcript 2009 Q4

Petrobras Earnings Call Transcript 2010 Q1

Petrobras Earnings Call Transcript 2010 Q2

Petrobras Earnings Call Transcript 2010 Q3 Petrobras Earnings Call Transcript 2010 Q4

Petrobras Earnings Call Transcript 2011 Q1

Petrobras Earnings Call Transcript 2011 Q2

Petrobras Earnings Call Transcript 2011 Q3

Petrobras Earnings Call Transcript 2011 Q4

Petrobras Earnings Call Transcript 2012 Q1

Petrobras Earnings Call Transcript 2012 Q2

Petrobras Earnings Call Transcript 2012 Q3

Petrobras Earnings Call Transcript 2012 Q3

Petrobras Earnings Call Transcript 2013 Q1

Petrobras Earnings Call Transcript 2013 Q2

Petrobras Earnings Call Transcript 2013 Q3

Confidential

Documents Considered

Petrobras Earnings Call Transcript 2013 Q4

Petrobras Earnings Call Transcript 2014 Q1

Petrobras Earnings Call Transcript 2014 Q2

Petrobras Earnings Call Transcript 2014 Q3

Petrobras Earnings Call Transcript 2014 Q4 Petrobras Earnings Call Transcript 2015 Q1

Petrobras Earnings Call Transcript 2015 Q2

Petrobras Earnings Call Transcript 2015 Q3

Petrobras Organization Chart

Petrobras Press Release, "Clarification on News - Pasadena," April 2, 2015

Petrobras, "Ethics Code Petrobras System," November 2006

Petrobras, "Fatos e Dados," (PT)

Petrobras, "Information and Documents"

Petrobras, "Petrobras - Petroleo Brasileiro S.A. By-Laws"

Petrobras, "Petrobras Conduct Guide," November 2014

Petrobras, "Petrobras Corruption Prevention Program," December 2014

S.Valle and J.Spinetto, "Brazil Fixated as 'Human Bomb' Revelations Rock Elections," Bloomberg, October 21,

2014, available at http://www.bloomberg.com/news/articles/2014-10-21/brazil-fixated-as-human-bomb-

revelations-rock-elections

Sarbanes-Oxley Act of 2002

SBM Offshore Press Release, "SBM Offshore 2015 Full-Year Earnings," February 10, 2016

SEC, DOJ, "A Resource Guide to the U.S. Foreign Corrupt Practices Act," November 14, 2012

W. Connors and Magalhaes, "How Brazil's 'Nine Horsemen' Cracked a Bribery Scandal," The Wall Street Journal, April 6, 2015

Public Filings

Petróleo Brasileiro S.A. - Consolidated Financial Statements 2009-2010 (IFRS)

Petróleo Brasileiro S.A. - Consolidated Financial Statements 2009-2011 (USD)

Petróleo Brasileiro S.A. - Petrobras 2001 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2002 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2003 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2003 Form 20-F, Amended

Petróleo Brasileiro S.A. - Petrobras 2004 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2005 Form 20-F

Petróleo Brasileiro S.A. – Petrobras 2006 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2006 Form 20-F, Amended

Petróleo Brasileiro S.A. - Petrobras 2007 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2008 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2009 Form 20-F Petróleo Brasileiro S.A. - Petrobras 2010 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2010 Form 20-F, Section 302 Certification

Petróleo Brasileiro S.A. – Petrobras 2011 Form 20-F, Amended

Petróleo Brasileiro S.A. – Petrobras 2011 Form 20-F, Section 302 Certification Petróleo Brasileiro S.A. - Petrobras 2012 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2012 Form 20-F, Section 302 Certification

Petróleo Brasileiro S.A. - Petrobras 2013 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2013 Form 20-F, Section 302 Certification

Petróleo Brasileiro S.A. - Petrobras 2014 Form 20-F

Petróleo Brasileiro S.A. - Petrobras 2014 Form 20-F, Section 302 Certification

Petróleo Brasileiro S.A. – Petrobras 2015 Form 20-F

Petróleo Brasileiro S.A. - Petrobras Form 6-K filed April 29, 2013

Petróleo Brasileiro S.A. - Petrobras Form 6-K filed September 9, 2014

Petróleo Brasileiro S.A. - Petrobras Form 6-K filed October 27, 2014

Petróleo Brasileiro S.A. - Petrobras Form 6-K filed November 14, 2014